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APPROVED O.G. FIG. 7D  
 BY SEP 30 2003  
 DR. P. MAN 713  
 CLASS 9 CLASS 84  
 TRADEMARK OFFICE 193

REPLACEMENT SHEET  
 APPLN NO.: 09/698,044

#10

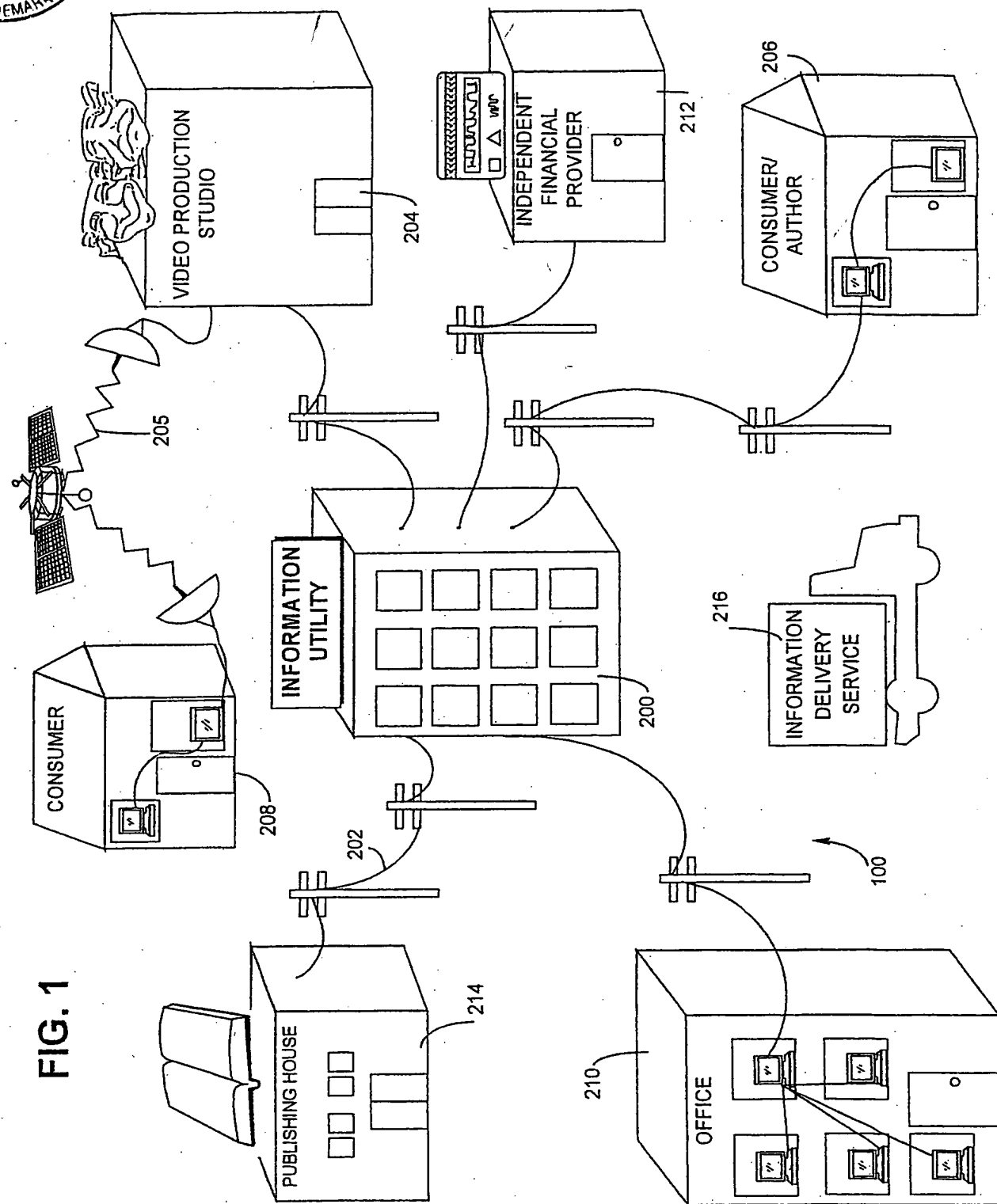


FIG. 1

147



FIG. 1A

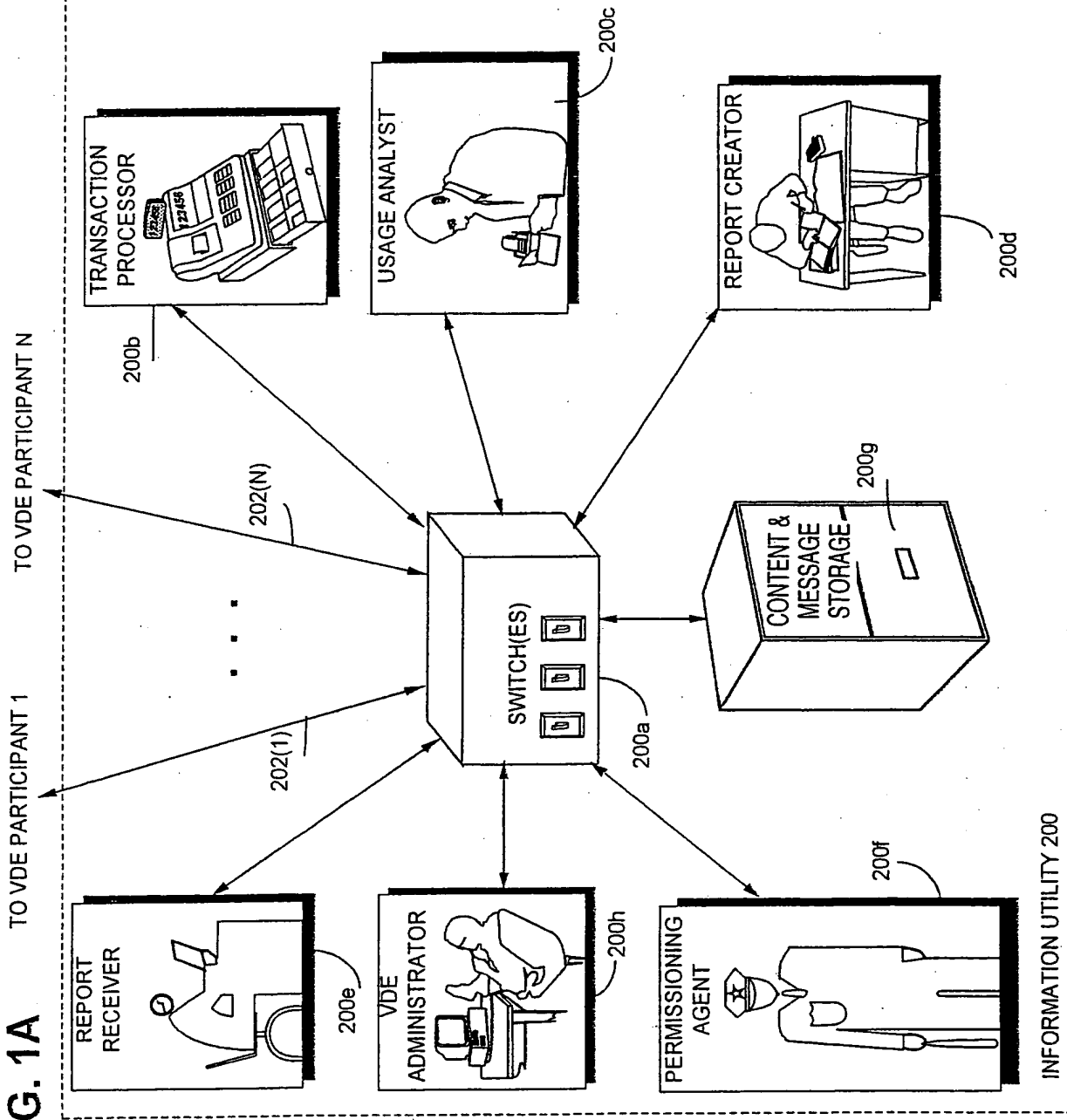




FIG. 2

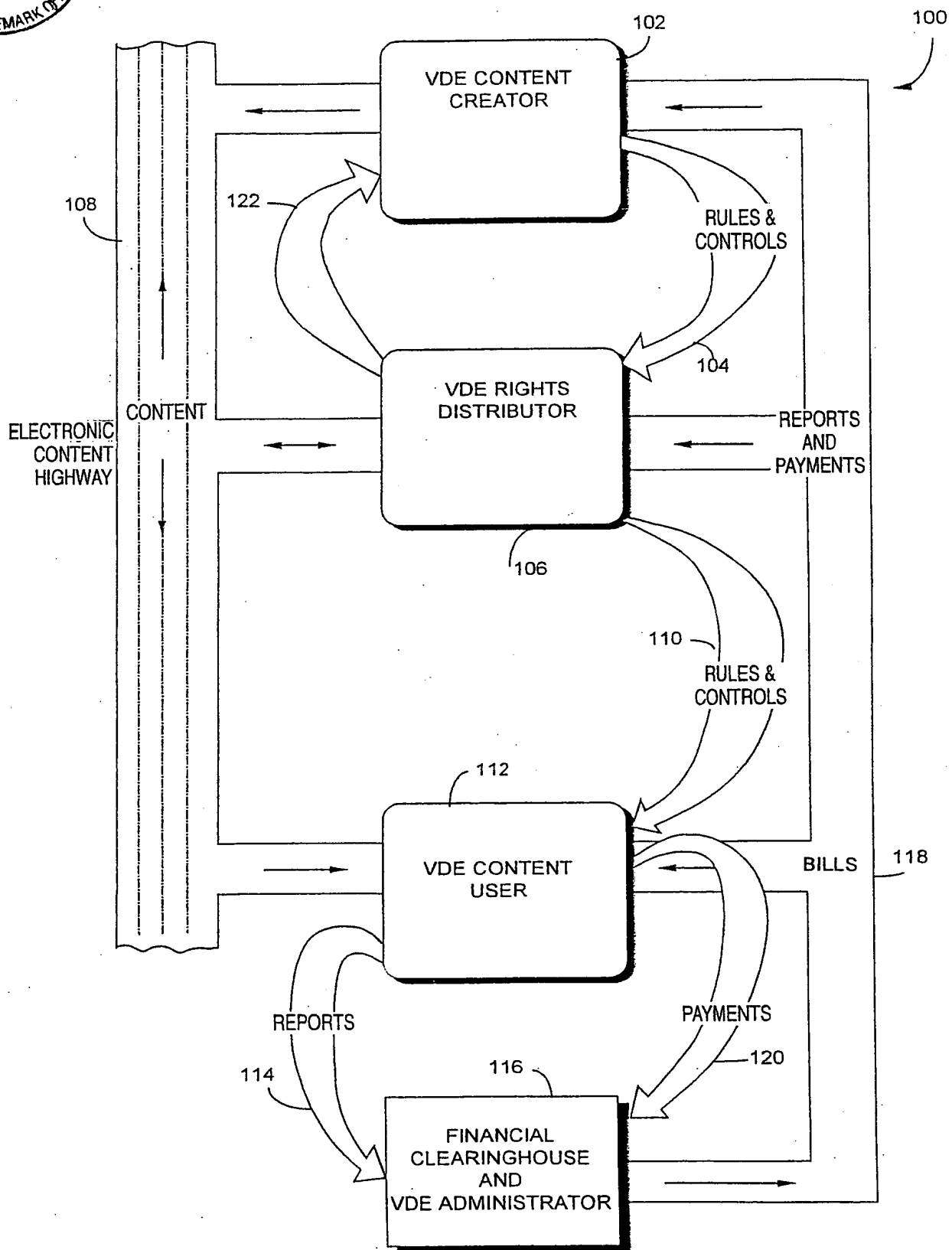




FIG. 2A

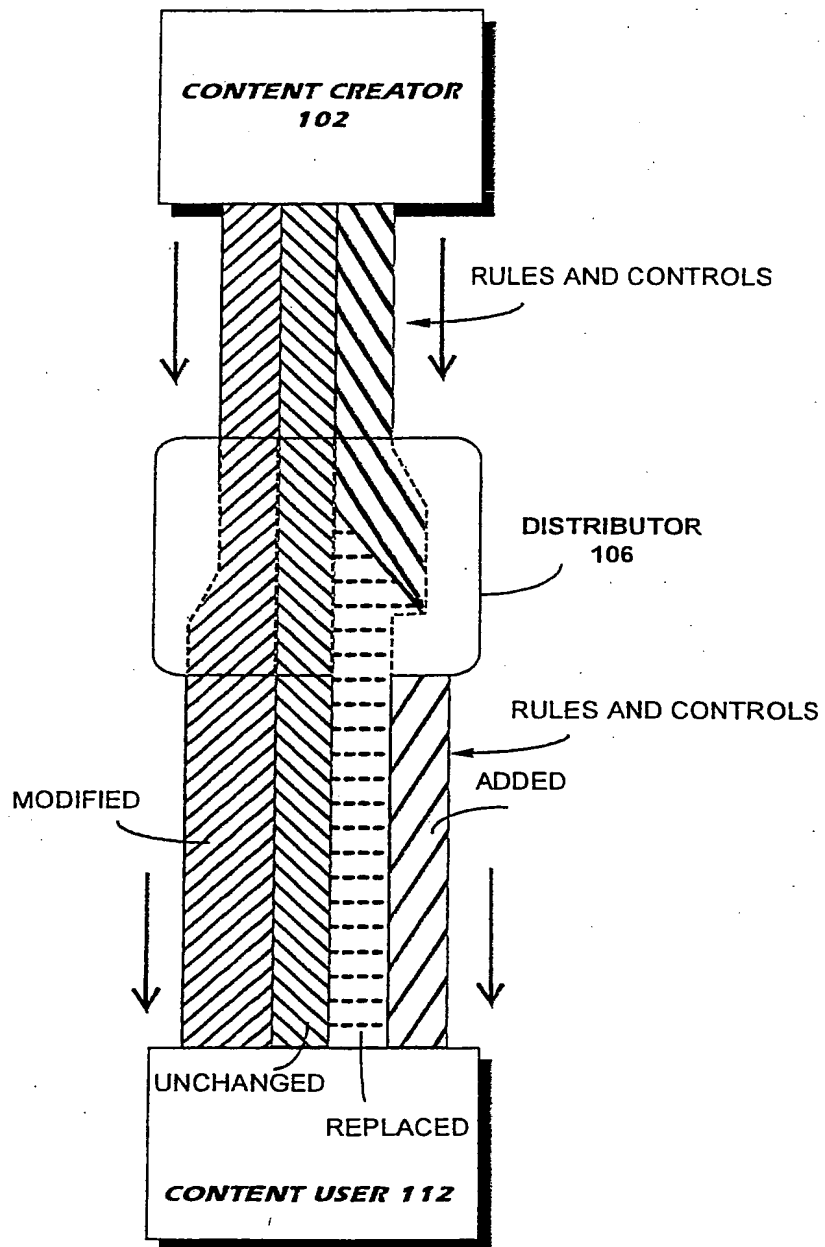
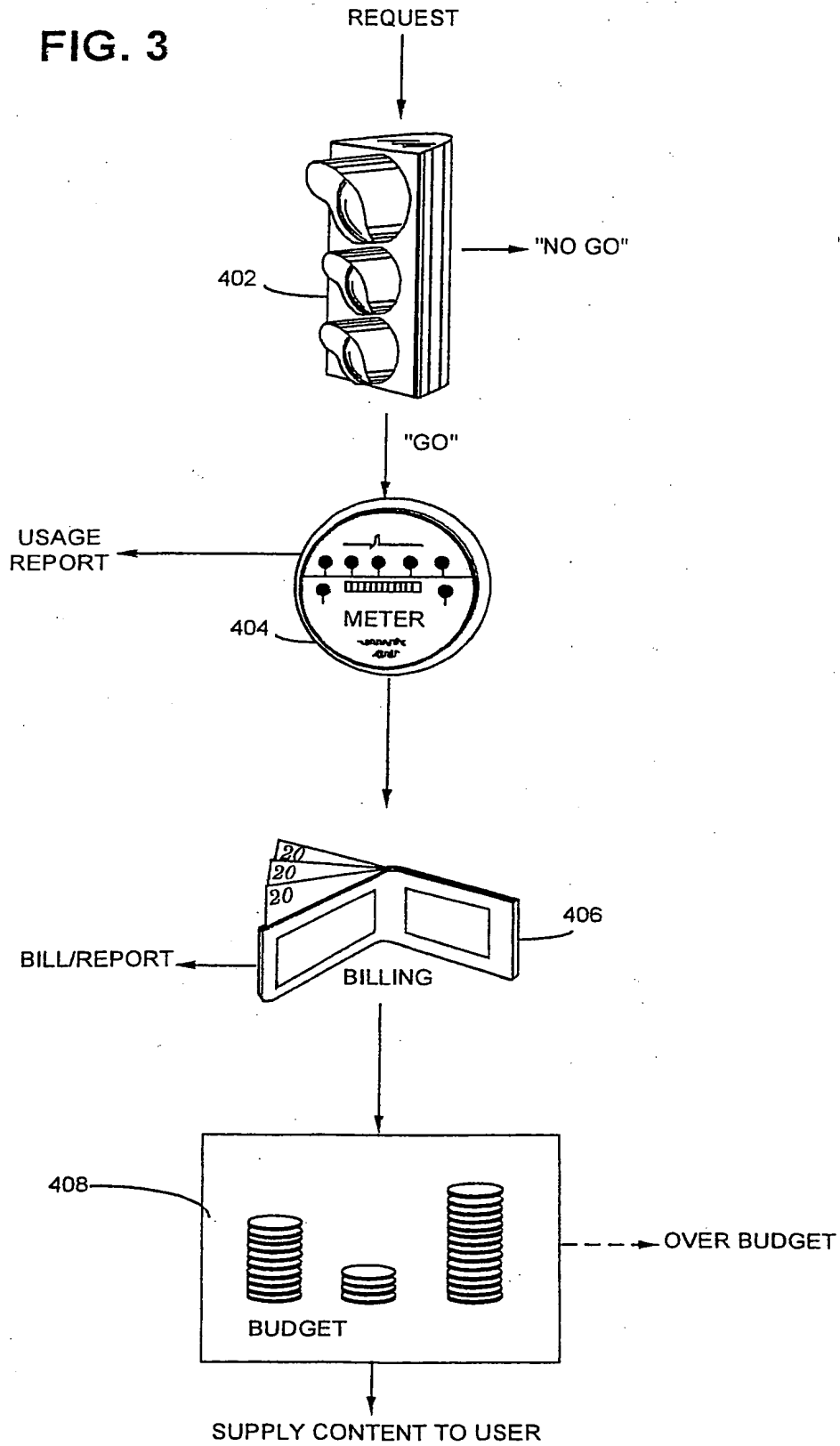




FIG. 3



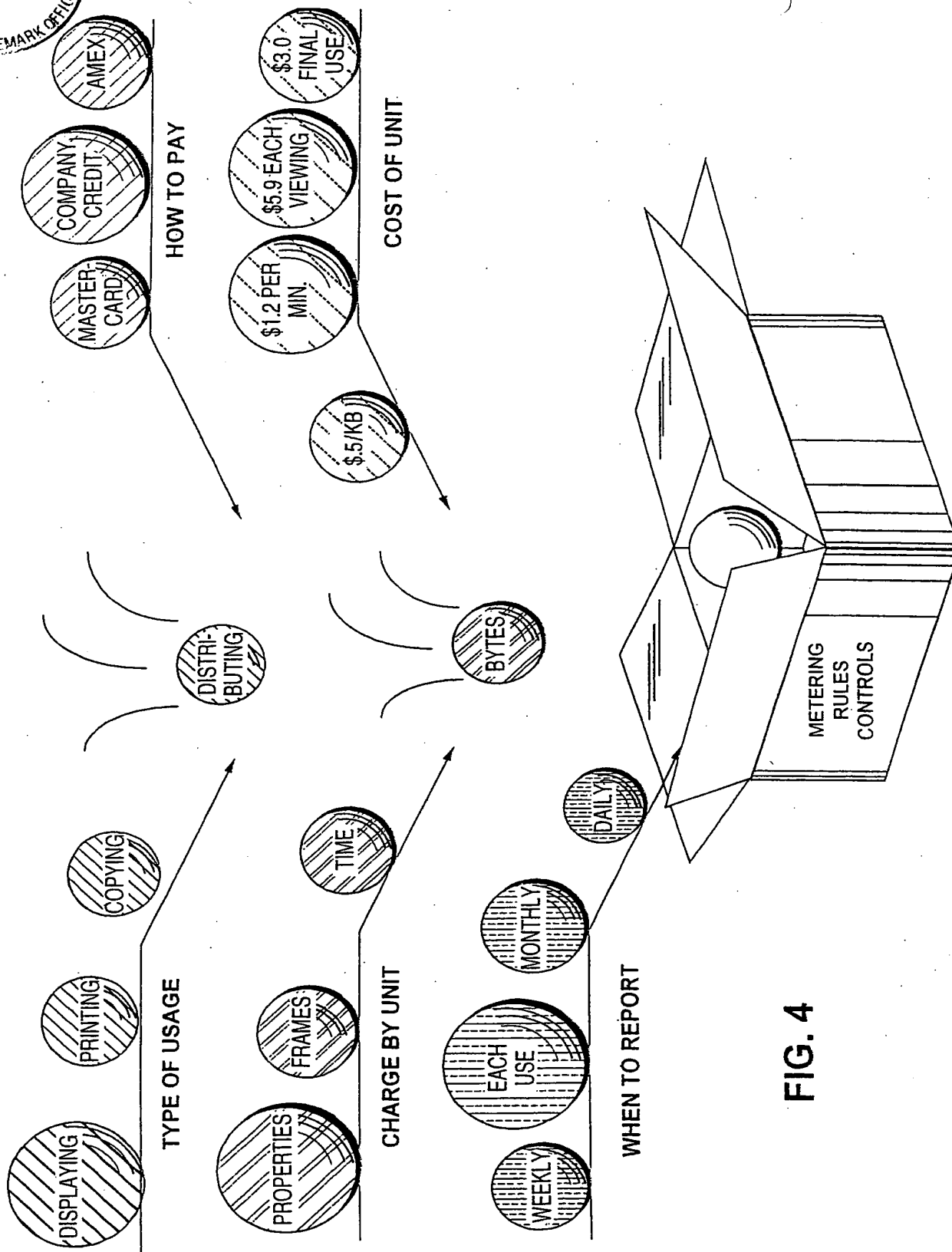


FIG. 4



**FIG. 5A**

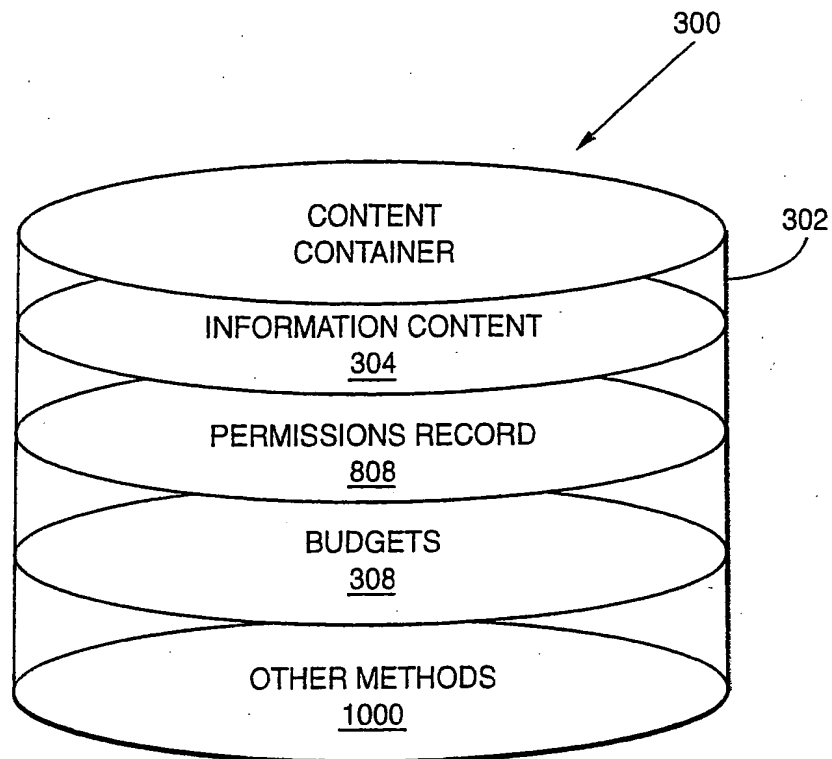
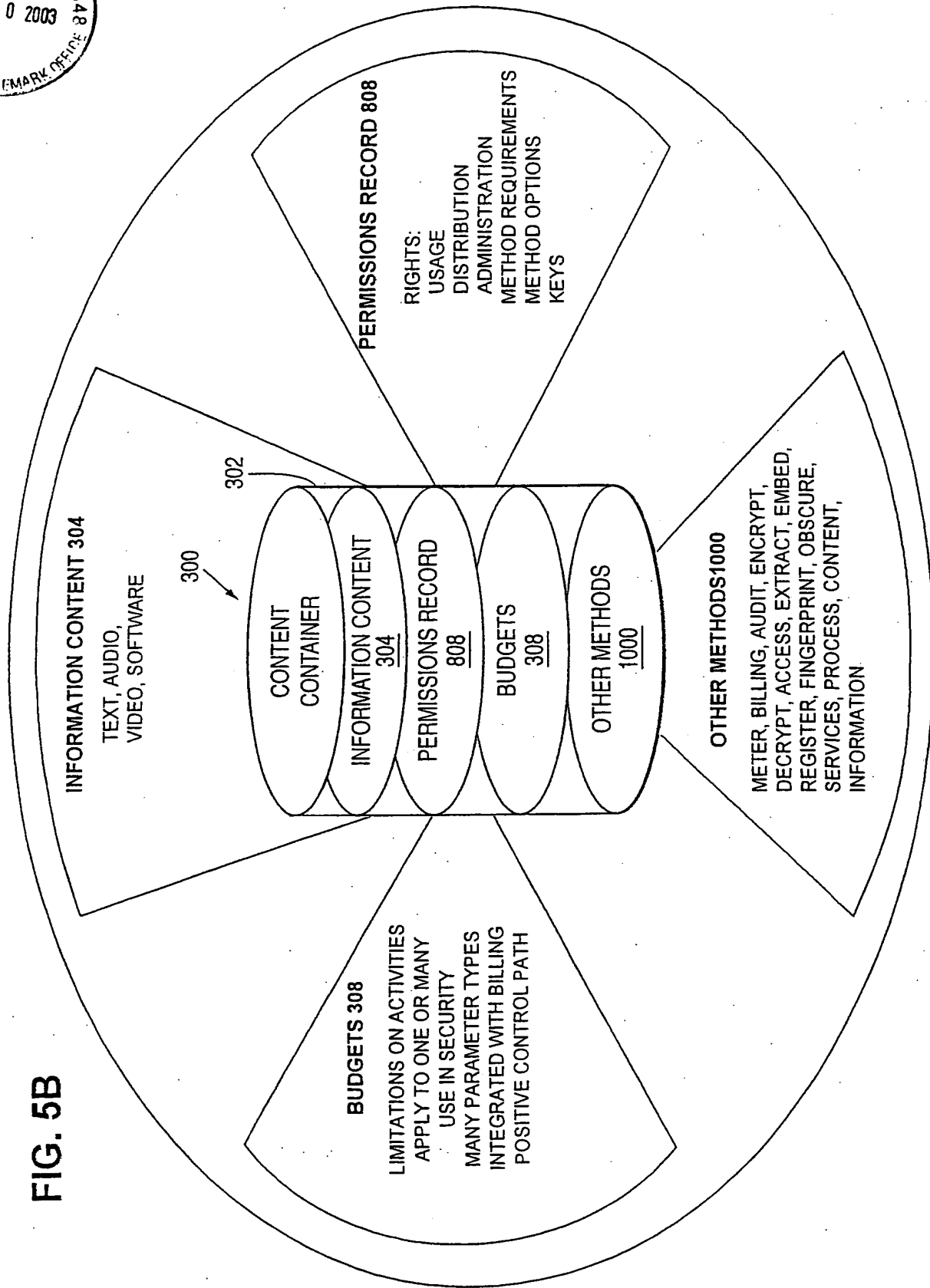






FIG. 5B





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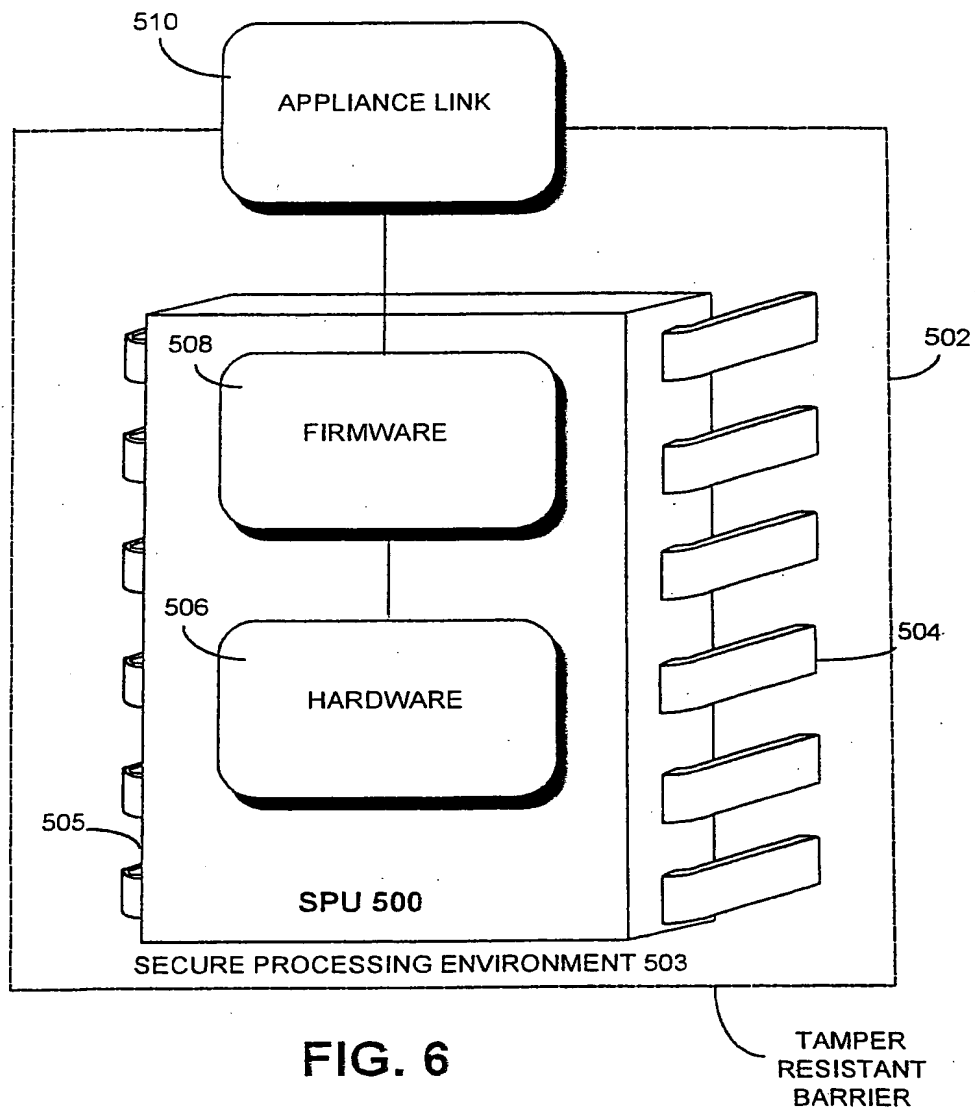




FIG. 7

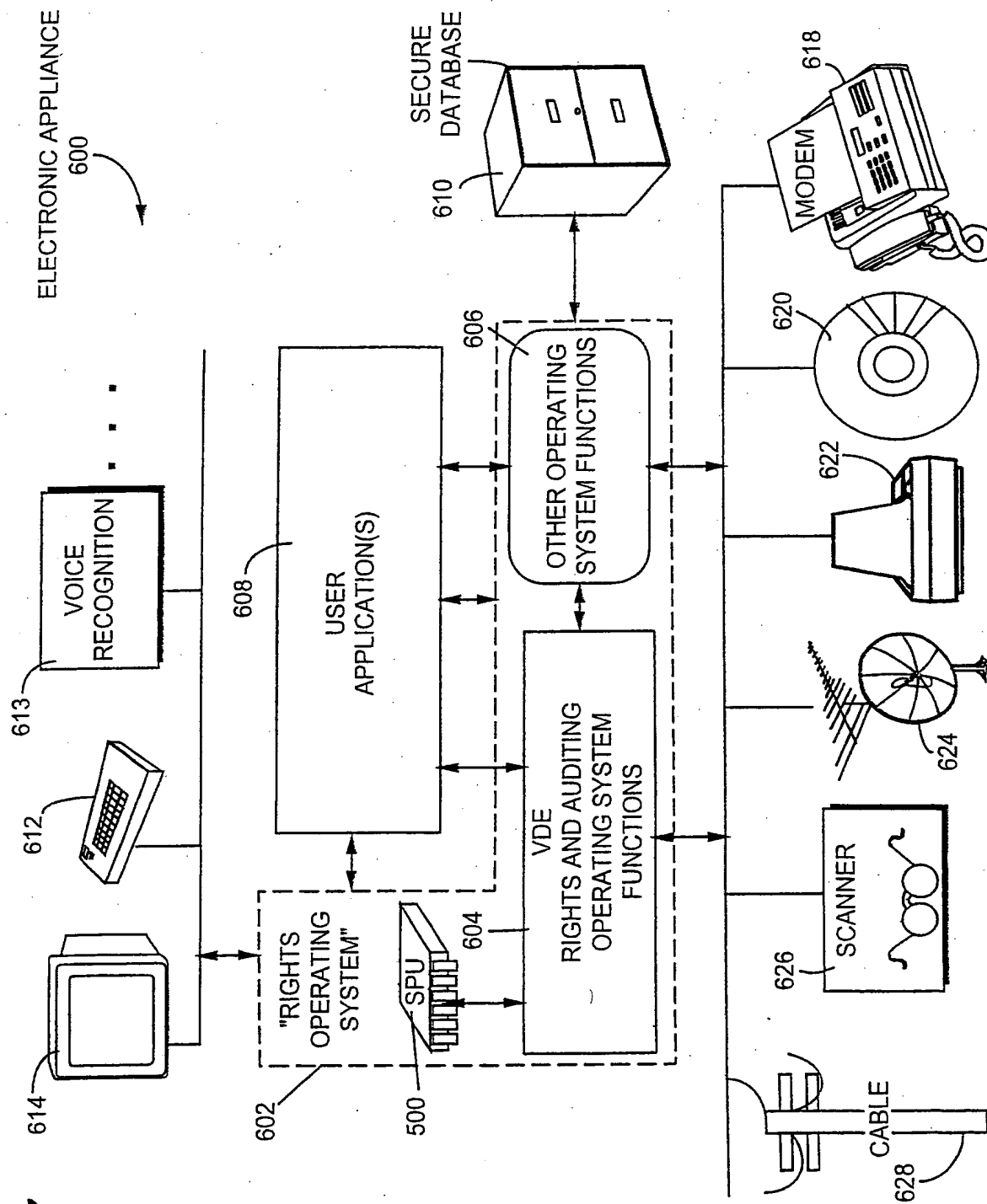
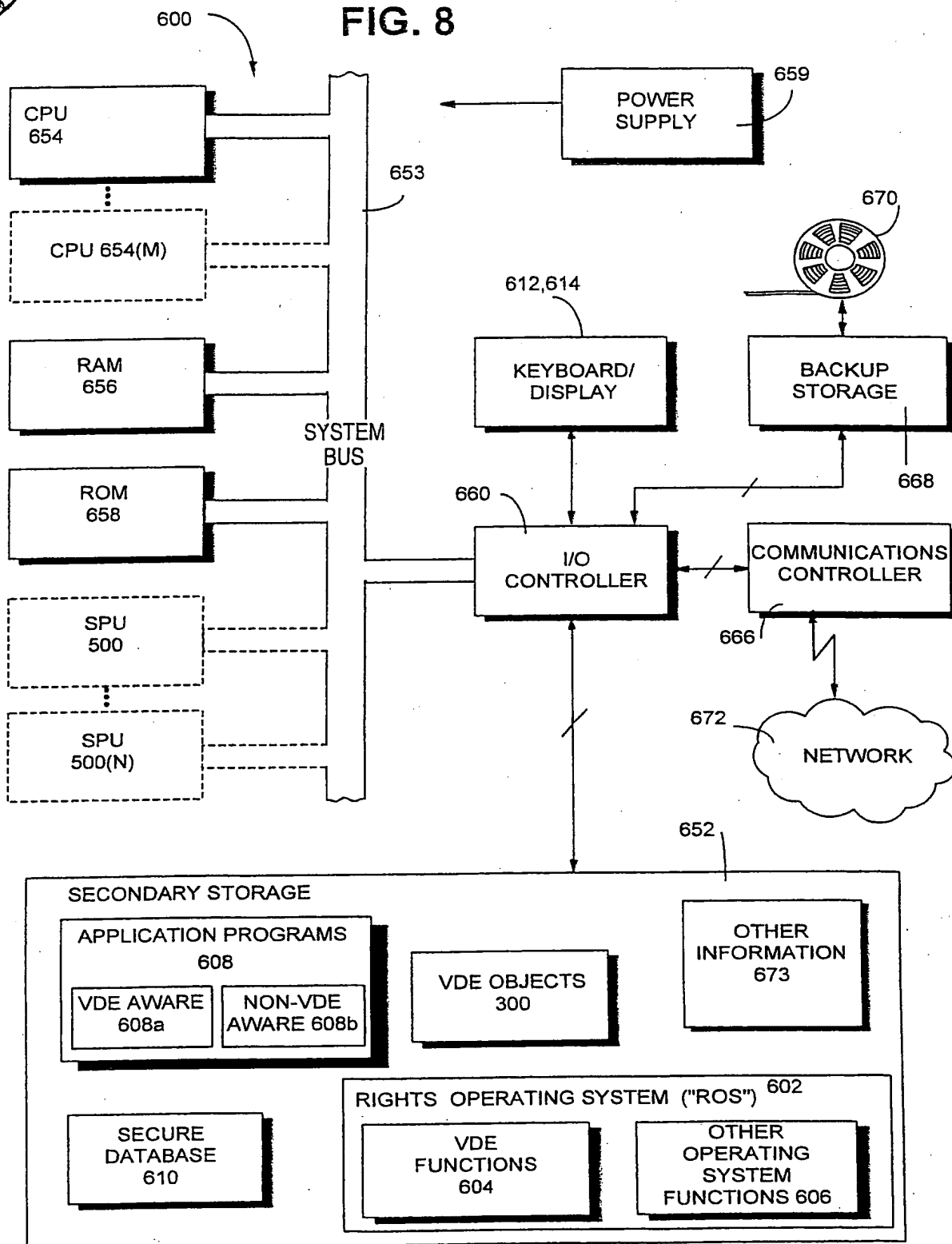
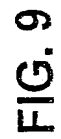




FIG. 8





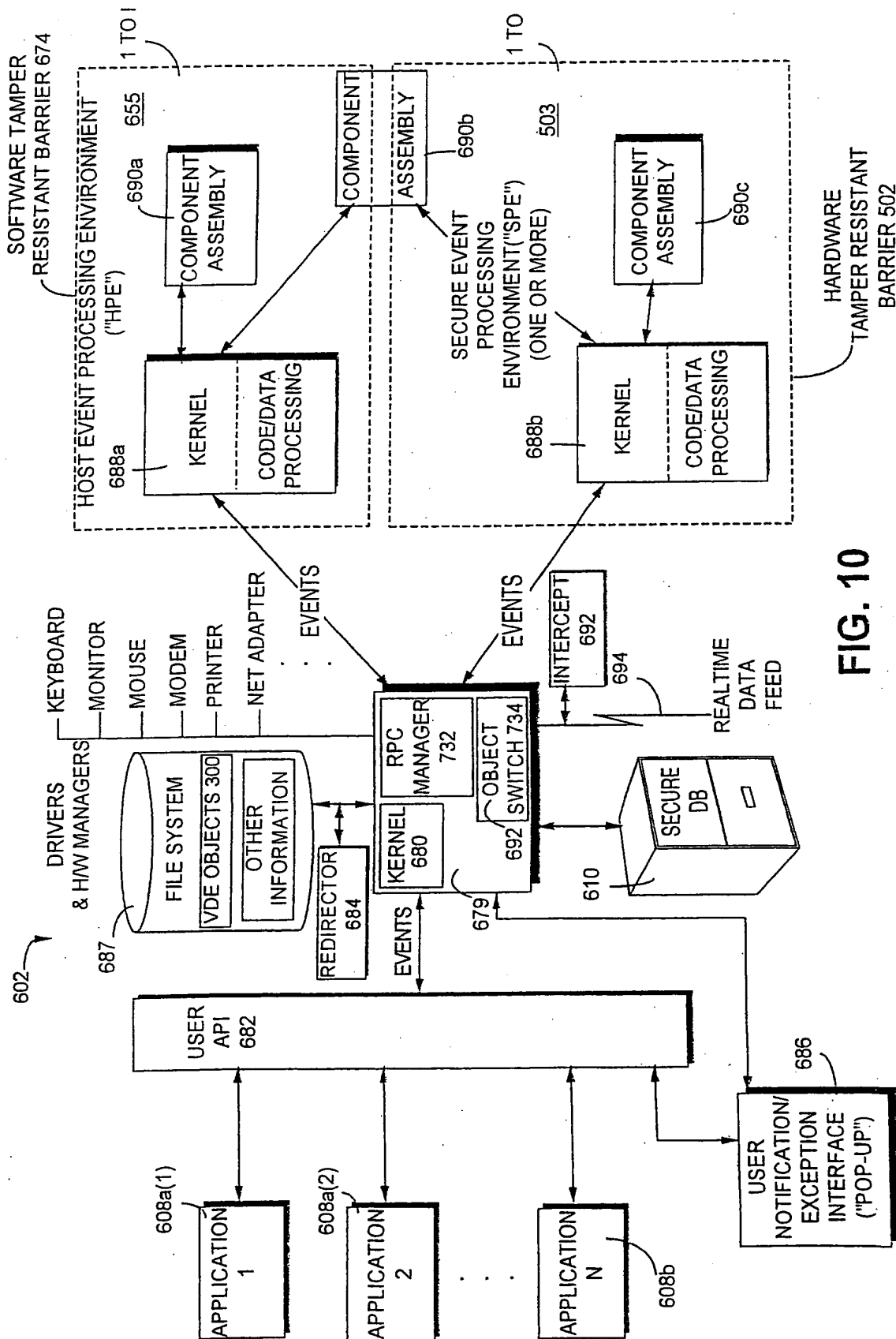




FIG. 11C

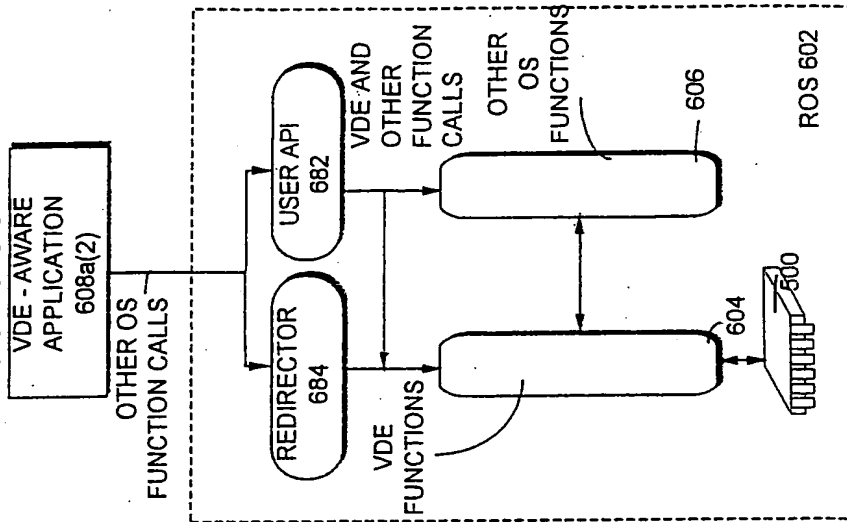


FIG. 11B

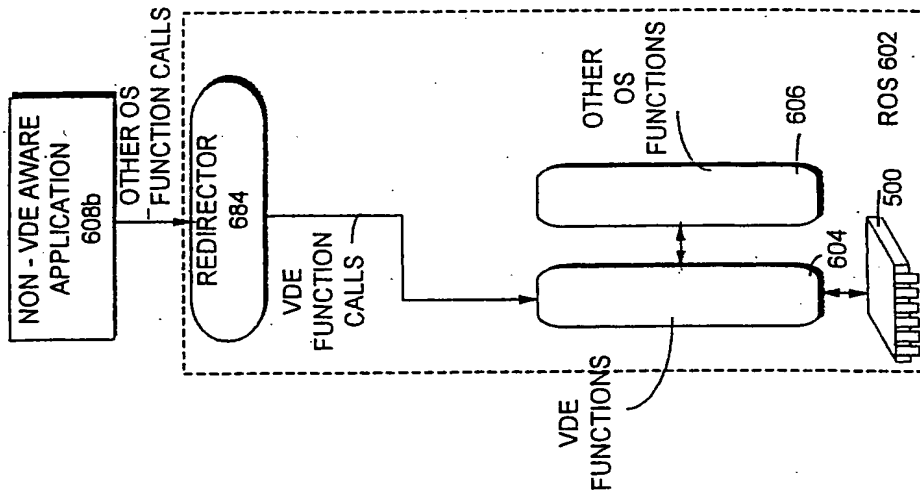
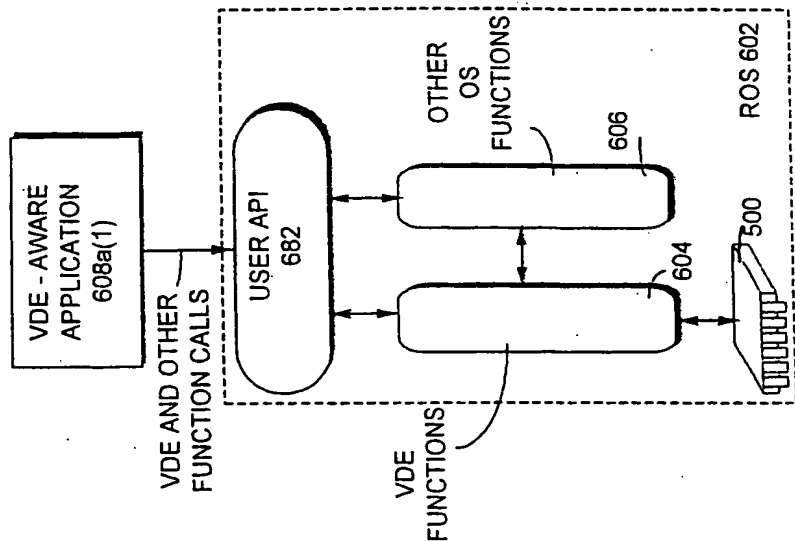


FIG. 11A



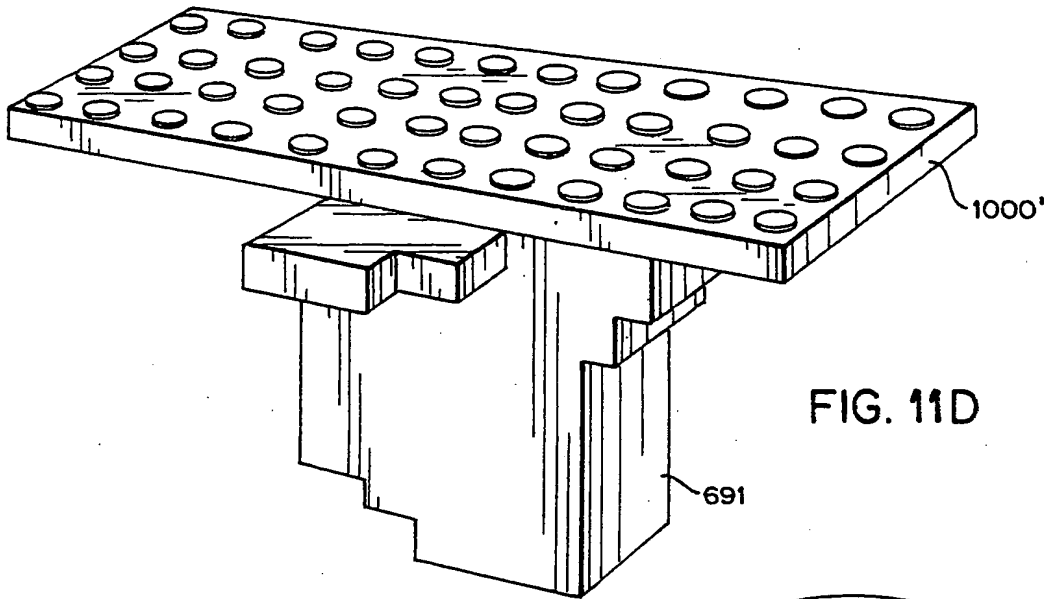


FIG. 11D

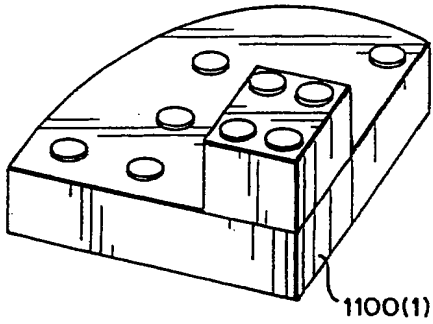


FIG. 11E

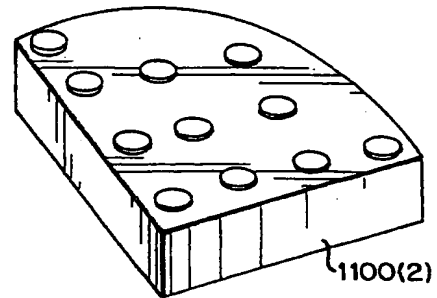


FIG. 11F

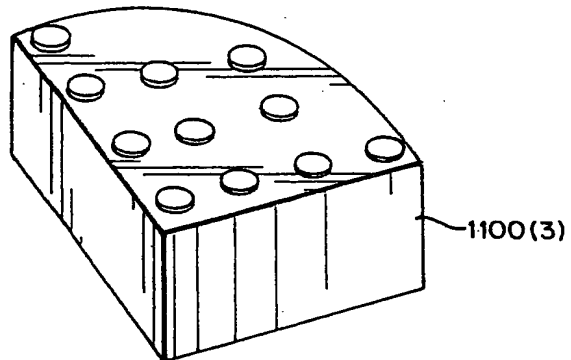


FIG. 11G





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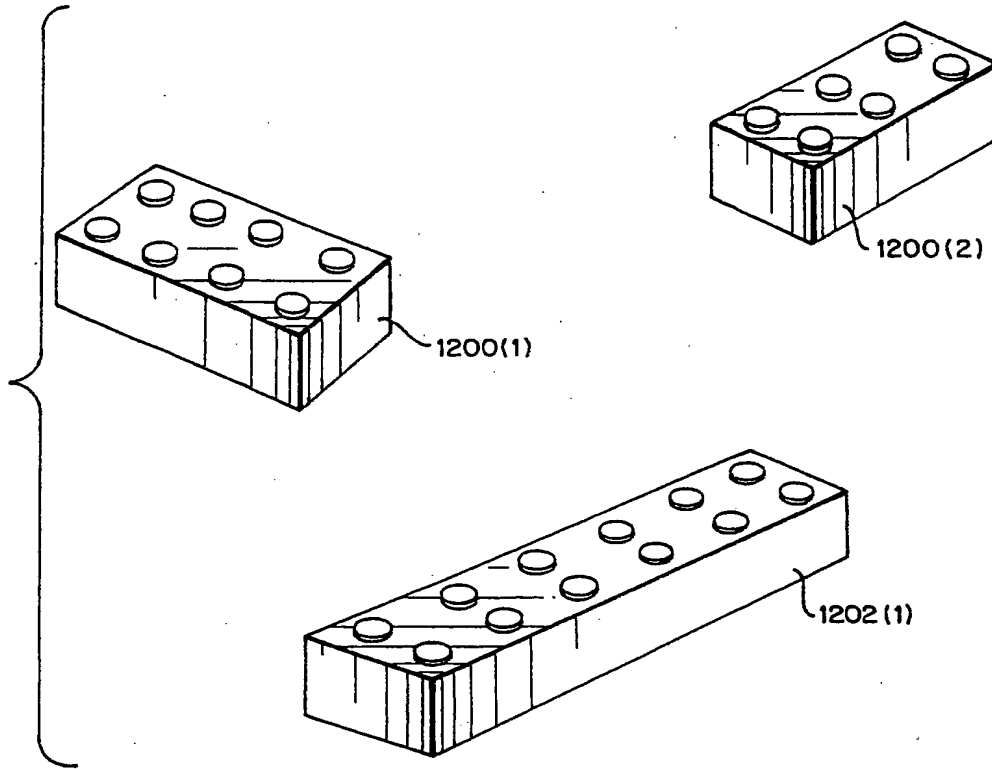
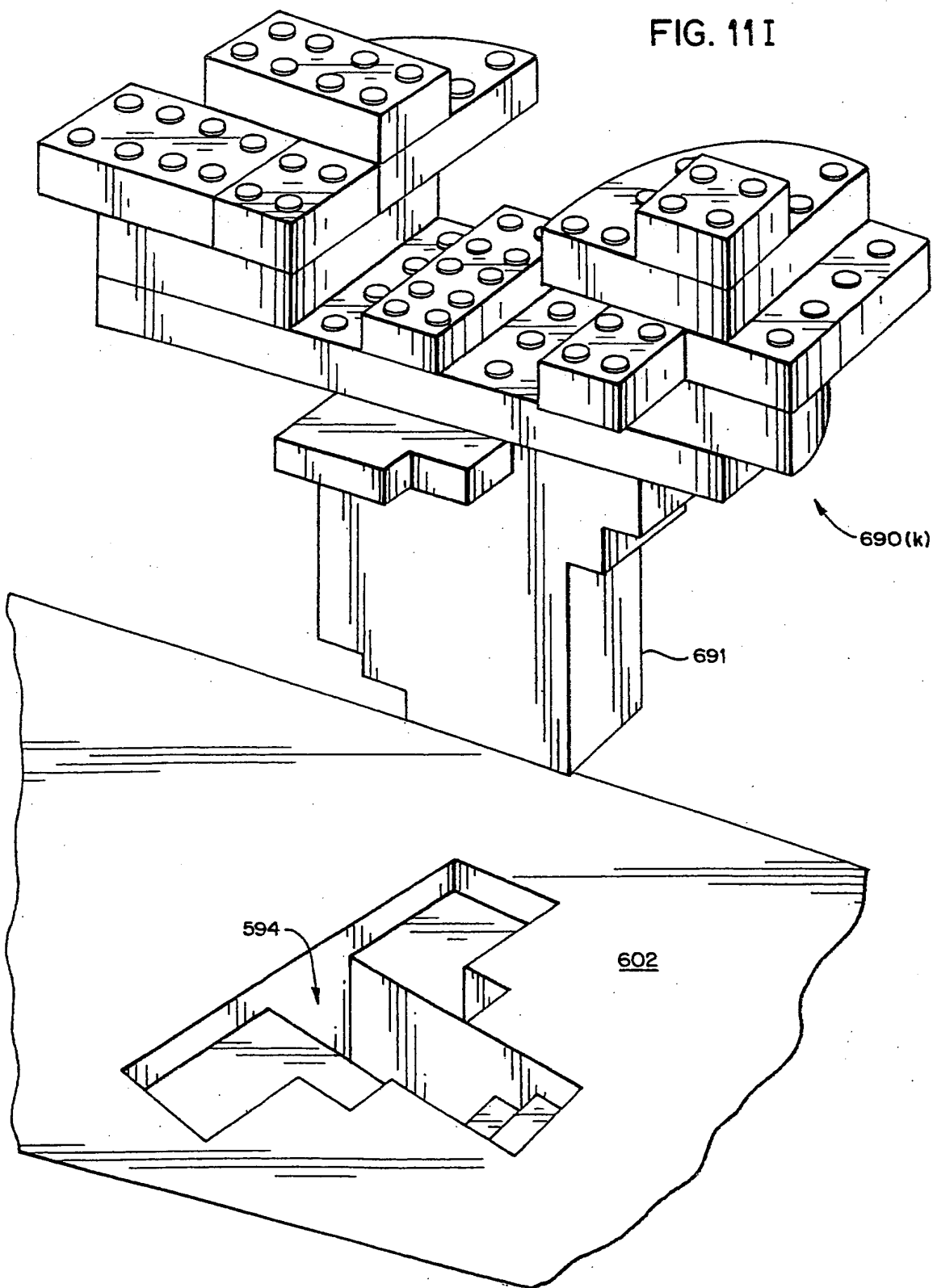


FIG. 11H



FIG. 11I





REPLACEMENT SHEET  
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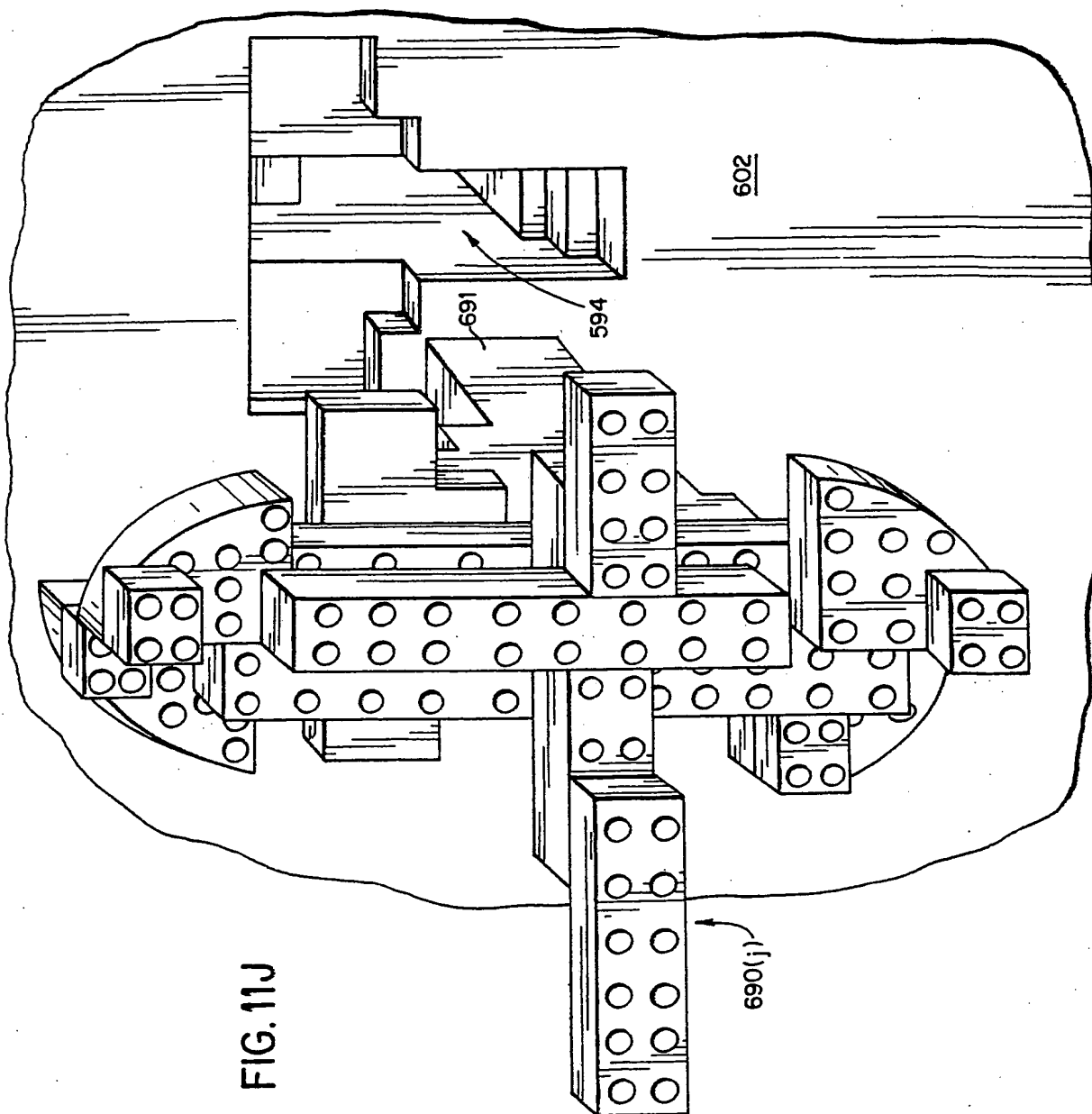


FIG. 11J

FIG. 12

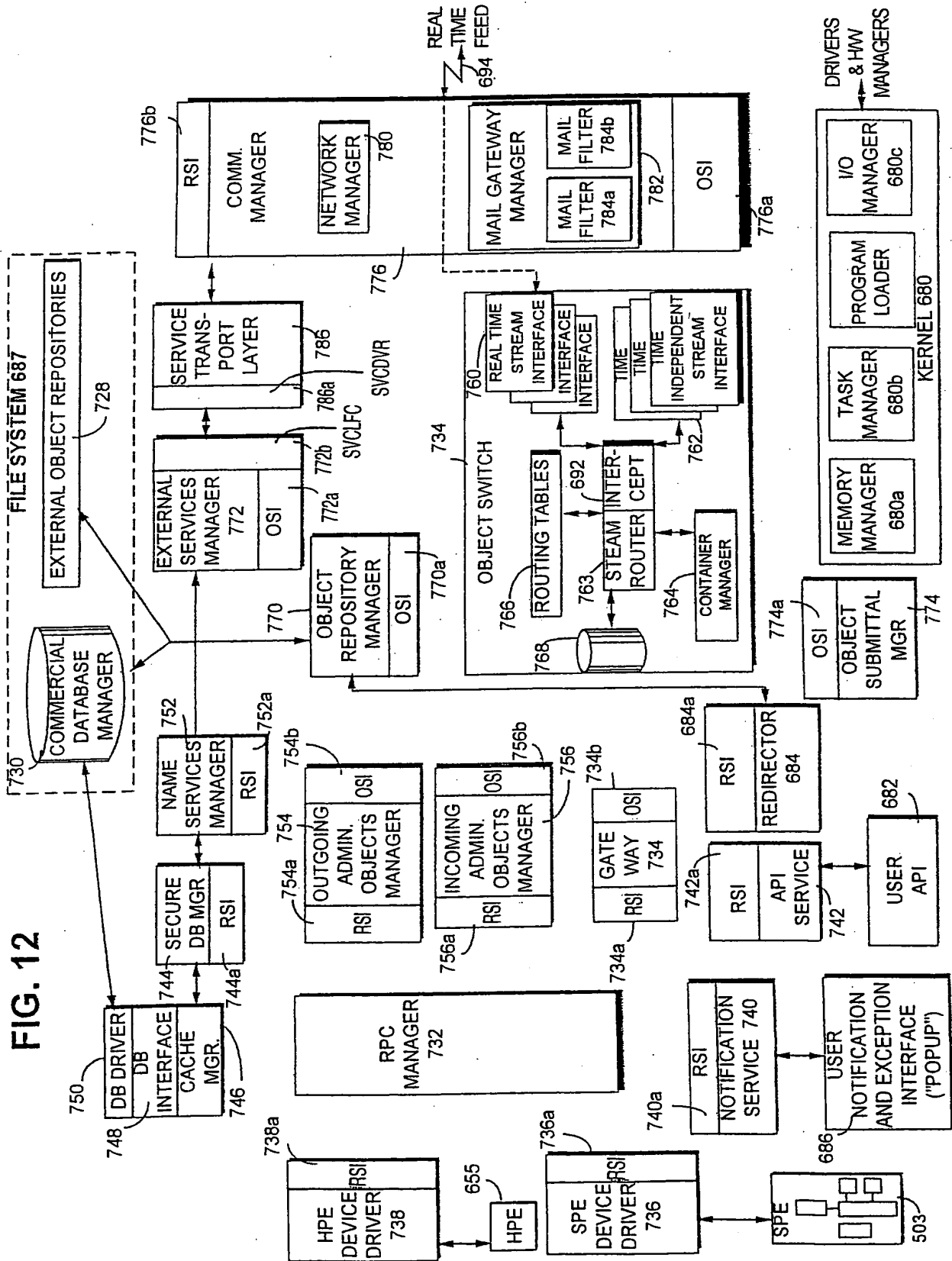
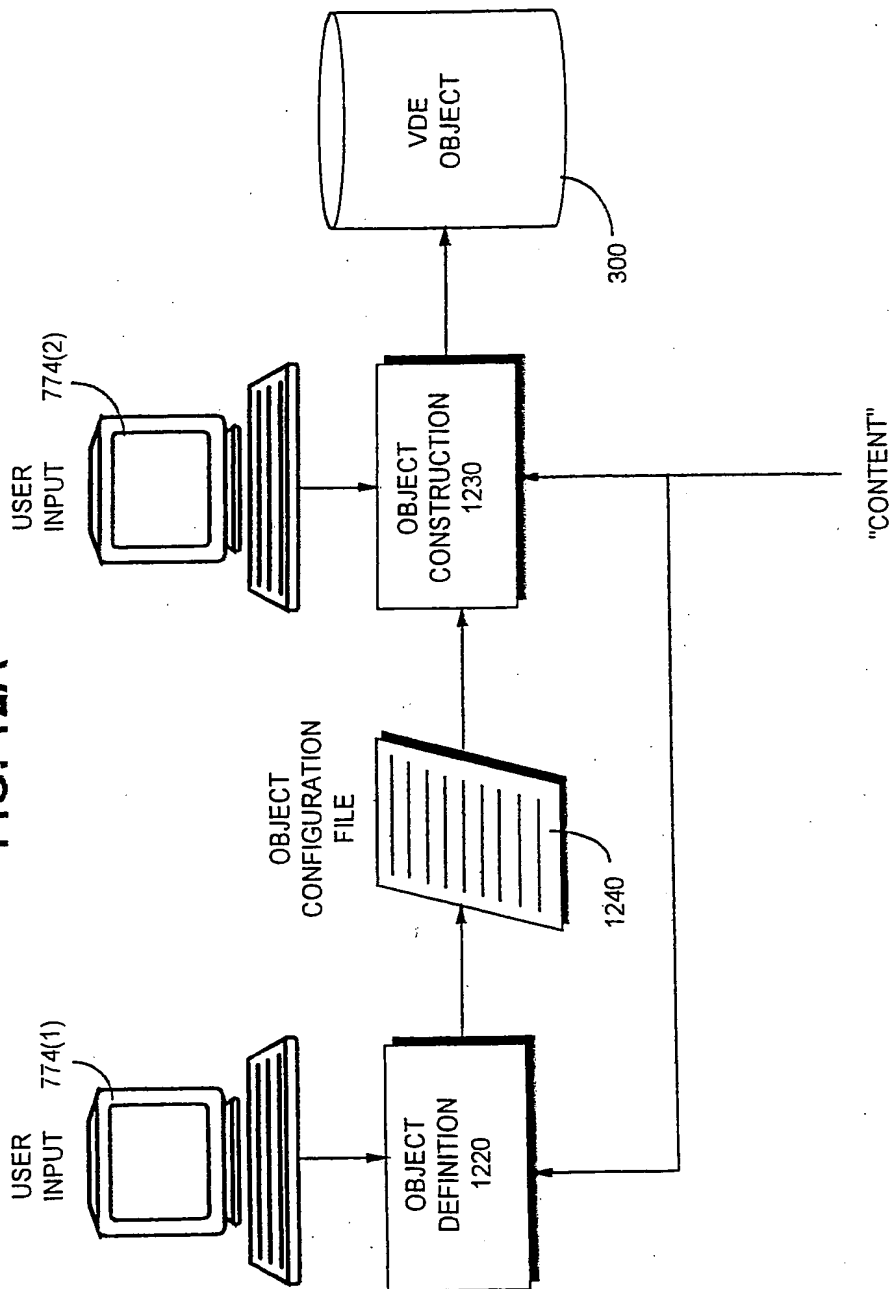




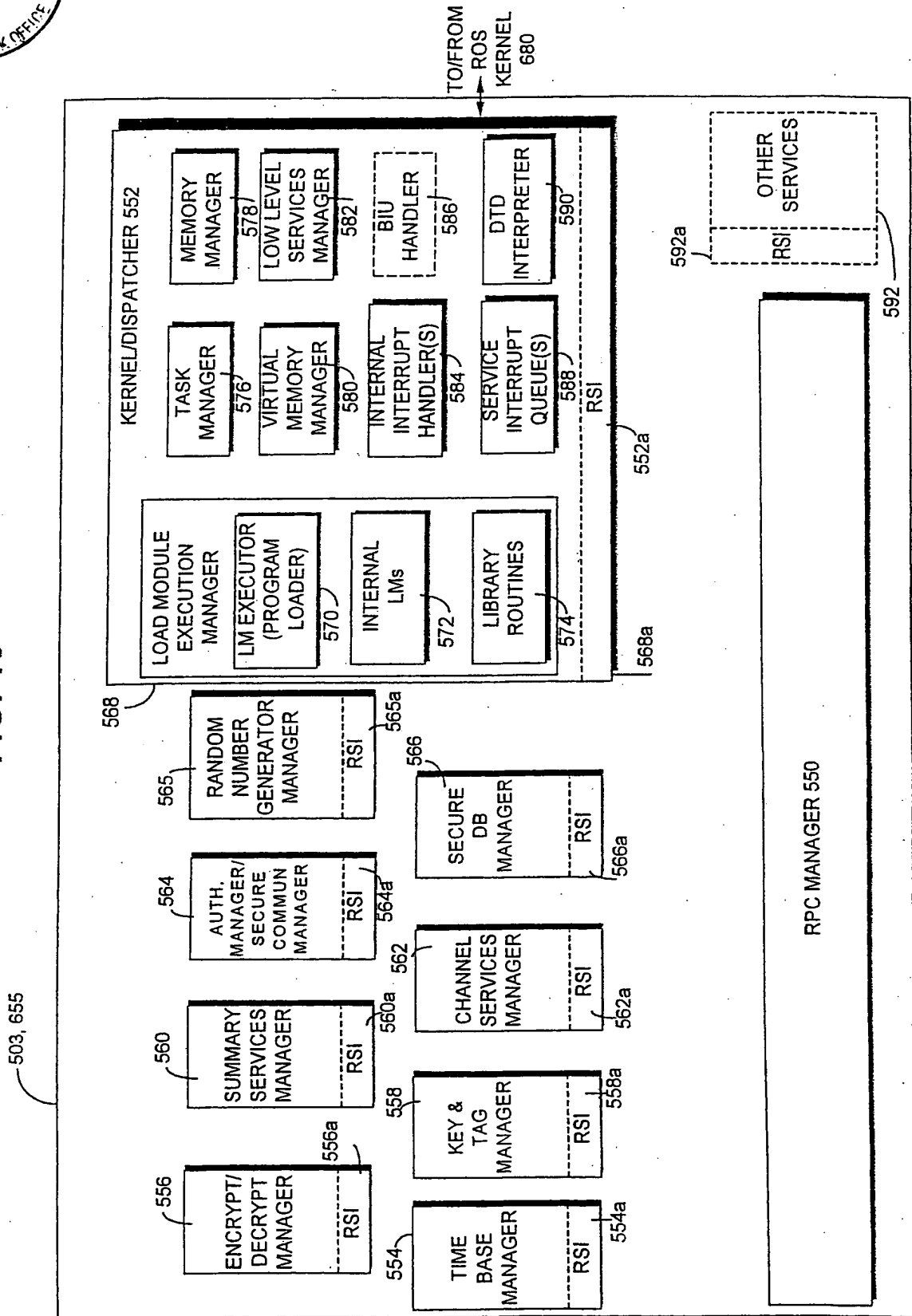
FIG. 12A





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FIG. 13





REPLACEMENT SHEET  
APPLN NO.: 09/698,044

FIG. 14A

DEVICE FIRM WIRE LOW LEVEL SERVICES 582
INITIALIZATION
POST
DOWNLOAD CHALLENGE/RESPONSE AND AUTHENTICATION
RECOVERY
EEPROM/FLASH MEMORY MANAGER
KERNEL/DISPATCHER 552
INITIALIZATION
TASK MANAGER 576 (SLEEP/AWAKE/CONTEXT SWAP)
INTERRUPT HANDLER 584 (TIMER/BIU/POWER FAIL/WATCHDOG TIMER/ENCRYPTION COMPLETED)
BIU HANDLER 586
MEMORY MANAGER 578
INITIALIZATION (SETTING MMU TABLES
ALLOCATE
DEALLOCATE
VIRTUAL MEMORY MANAGER 580
SWAP BLOCK PAGING
EXTERNAL MODULE PAGING
MEMORY COMPRESS
RPC AND TABLES 550
INITIALIZATION
MESSAGING CODE /SERVICES MANAGER
SEND/RECEIVE
STATUS
RPC DISPATCH TABLE
RPC SERVICE TABLE

•  
•  
•

TIME BASE MANAGER 554
ENCRYPTION/DECRYPTION MANAGER 556
PK
BULK
KEY AND TAG MANAGER 558
KEY STORAGE IN EEPROM
KEY LOCATOR
KEY GENERATOR
CONVOLUTION ALGORITHM
SUMMARY SERVICES MANAGER 560
EVENT SUMMARIES
BUDGET SUMMARIES
DISTRIBUTER SUMMARY SERVICES
CHANNEL SERVICES MANAGER 562
CHANNEL HEADERS
CHANNEL DETAILS
LOAD MODULE EXECUTION SERVICES 568
AUTHENTICATION MANAGER/SECURE COMMUNICATION MANAGER 564
DATABASE MANAGER 566
MANAGEMENT FILE SUPPORT
TRANSACTION AND SEQUENCE NUMBER SUPPORT
SRN/ HASH
DTD INTERPRETER 590
LIBRARY ROUTINES 574
I/O CALLS (STRING SEARCH ETC.)
MISC. ITEMS THAT ARE PROBABLY LIBRARY ROUTINES
TAG CHECKING, MD5, CRC'S
INTERNAL LM'S 572 FOR BASIC METHODS
METER LOAD MODULE(S)
BILLING LOAD MODULE(S)
BUDGET LOAD MODULE(S)
AUDIT LOAD MODULE(S)
READ OBJECT LOAD MODULE(S)
WRITE OBJECT LOAD MODULE(S)
OPEN OBJECT LOAD MODULE(S)
CLOSE OBJECT LOAD MODULE(S)

•  
•  
•



## FIG. 14B

⋮

PUBLIC KEY AND PRIVATE KEY, SYSTEM ID, AUTHENTICATION CERTIFICATE, VDE SYSTEM PUBLIC KEY, PRIVATE DES KEY
TOP LEVEL KEYS FOR OBJECTS
TOP LEVEL BUDGET INFO
METER SUMMATION VALUES
KEY RECORDS FOR BUDGET RECORDS, AUDIT RECORDS, STATIC MANAGEMENT RECORDS, UPDATED MANAGEMENT RECORDS, ETC.
⋮
DEVICE DATA TABLE
SITE ID
TIME
ALARMS
TRANSACTION/SEQUENCE #'S
MISCELLANEOUS
MEMORY MAP
MAP METERS
LM/UDT TABLE
TASK MANAGER 576
CHANNEL(S)
SUMMARY SERVICES 560
SECURE DATABASE TAGS
SRN ENTRIES
HASH ENTRIES

⋮





FIG. 14C

STACK	
CHANNEL SWAP BLOCK	CHANNEL LM
	CHANNEL HEADER & D1
CONTROL SWAP BLOCK	CONTROL LM
	CONTROL D1
	COMMIT LM
	COMMIT D1, D2, D3
EVENT SWAP BLOCK	EVENT LM
	MAP TABLE (SINGLE) D1
METER SWAP BLOCK	METER LM
	METER UDE DELTA,DELTA'
	METER TRAIL LM
	METER TRAIL UDE DELTA,DELTA'
BUDGET SWAP BLOCK	METER LM
	METER UDE DELTA,DELTA'
	METER TRAIL LM
	METER TRAIL UDE DELTA,DELTA'
BILLING SWAP BLOCK	BILLING LM
	METER UDE
	BUDGET UDE
	BILLING TABLE UDE
	BILLING TRAIL LM
	BILLING TRAIL UDE DELTA'

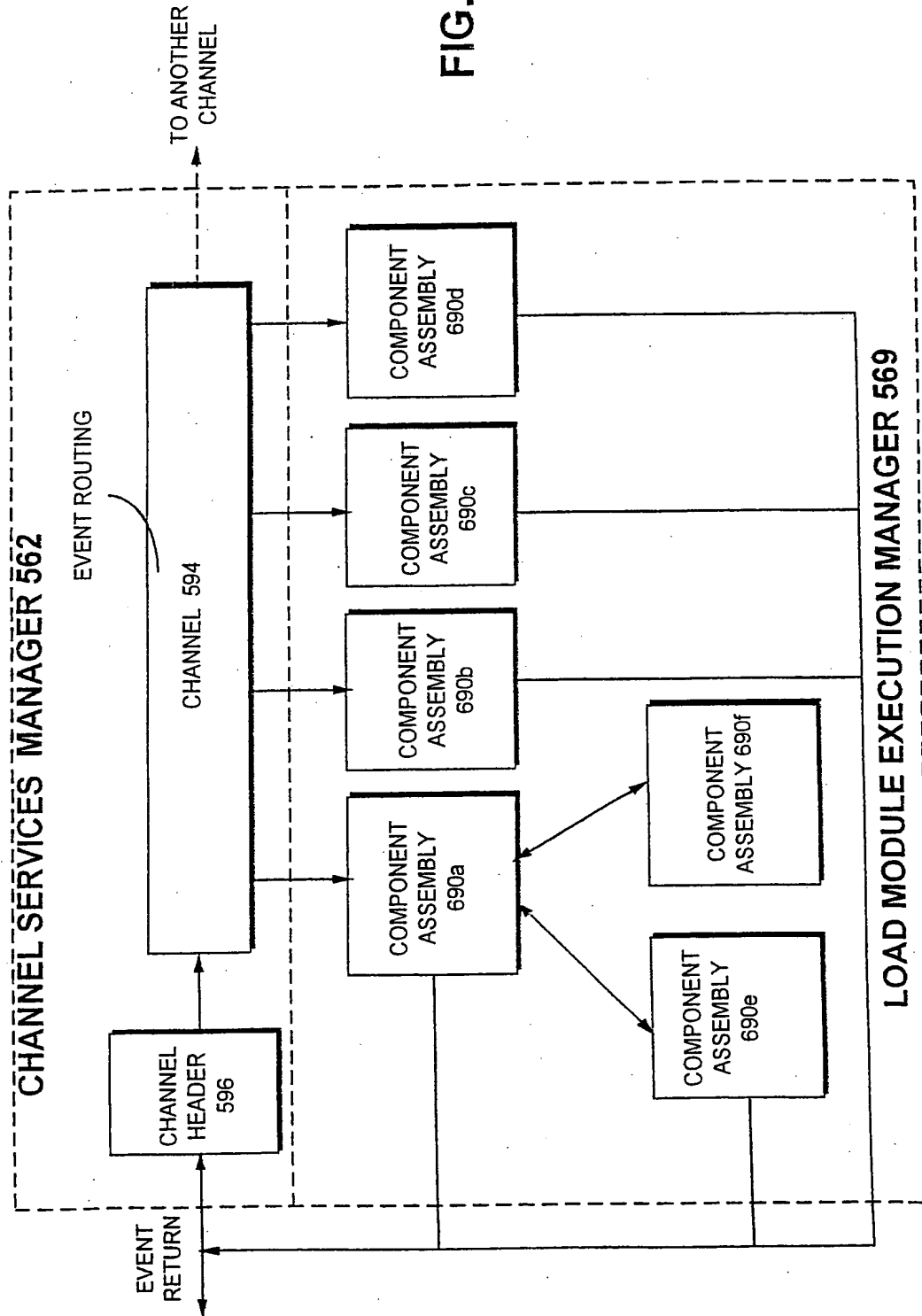


FIG. 15



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FIG. 15A

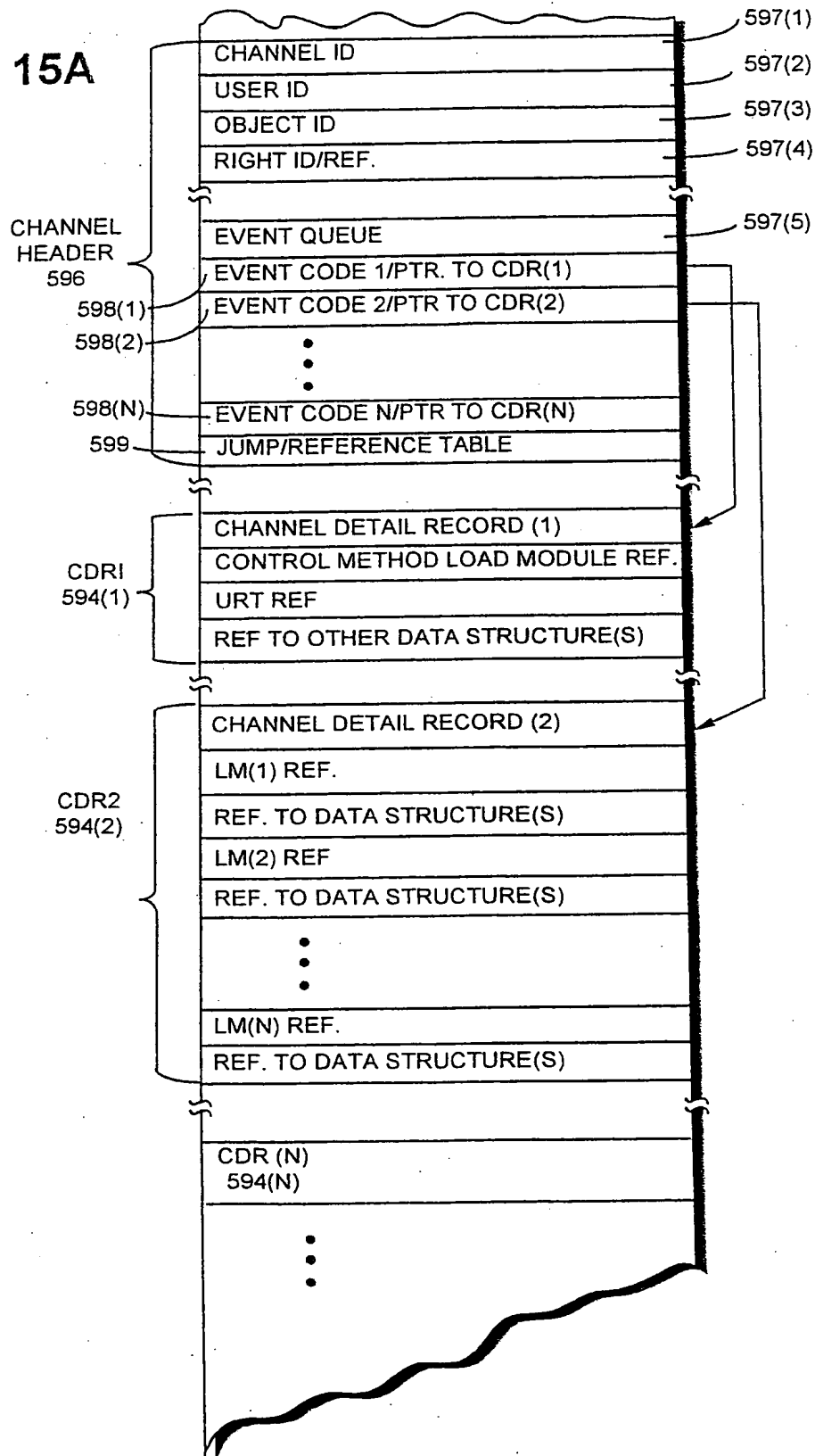




FIG. 15B

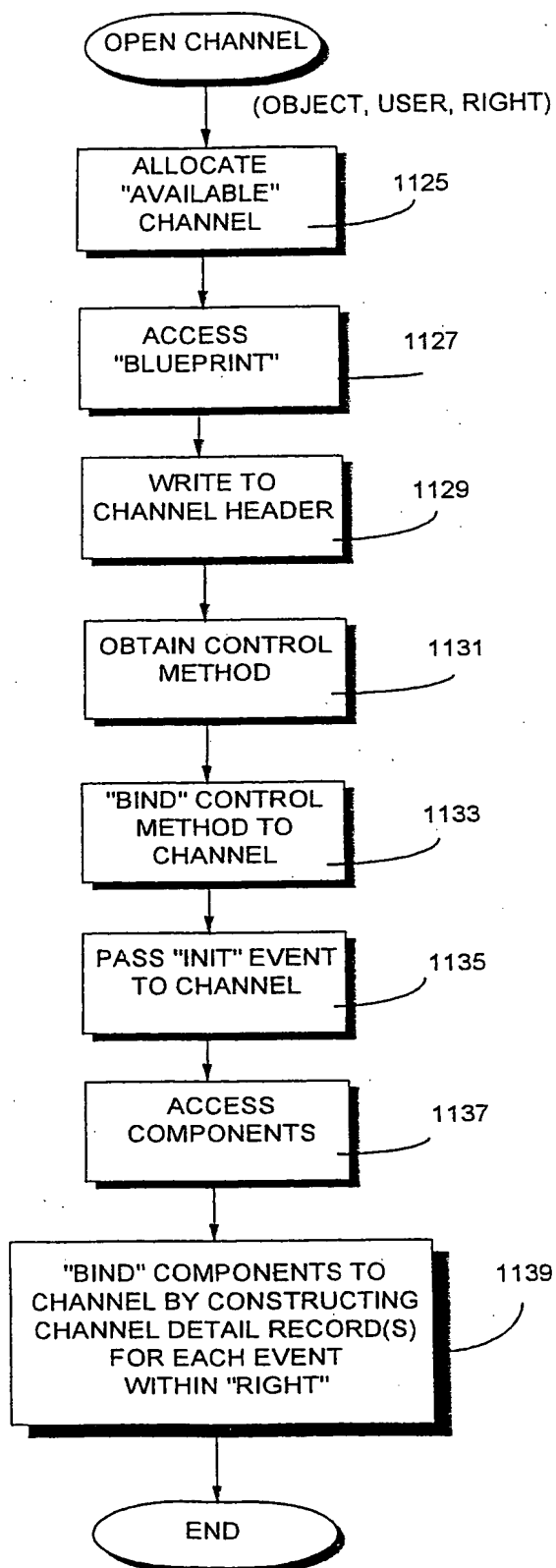
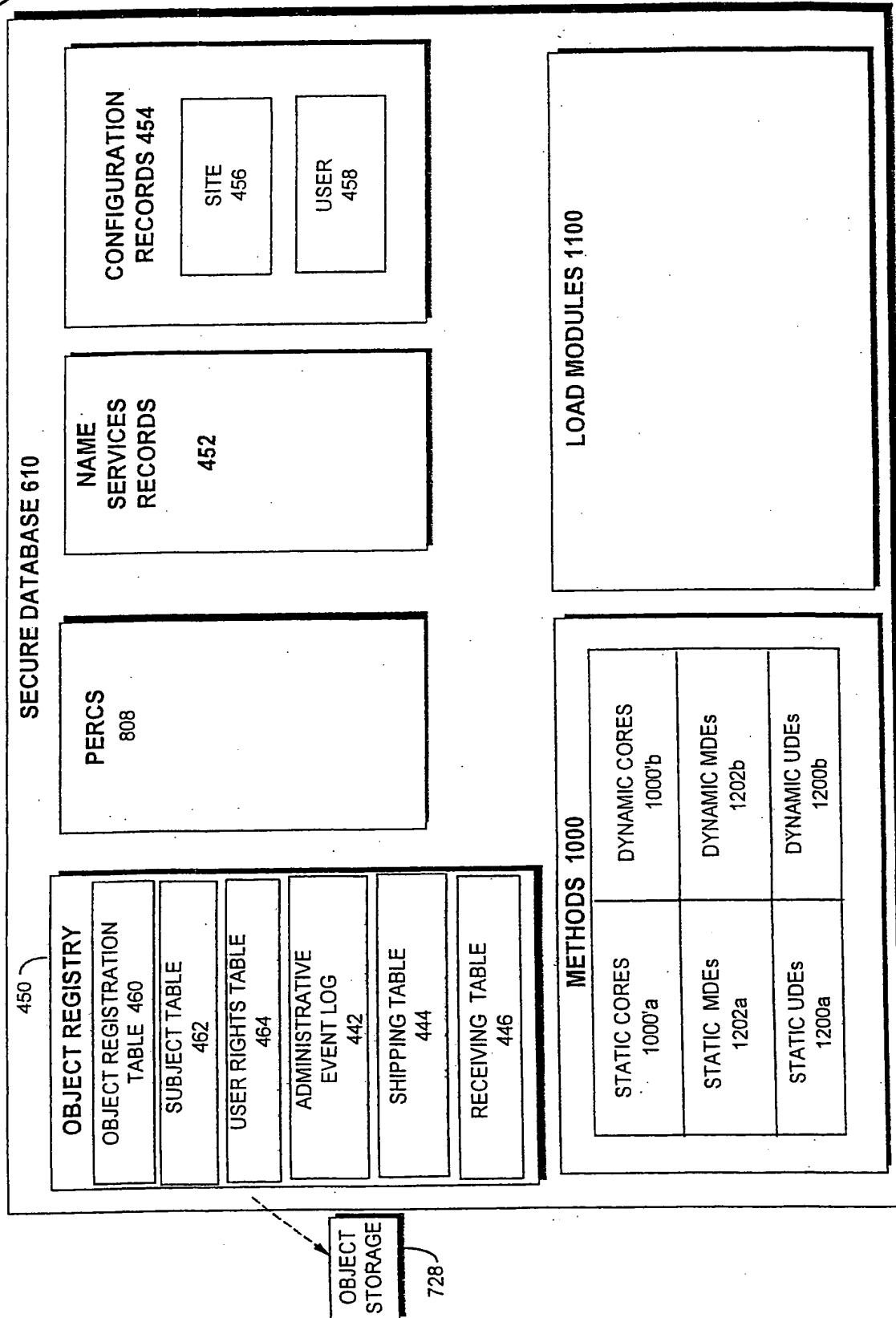




FIG. 16



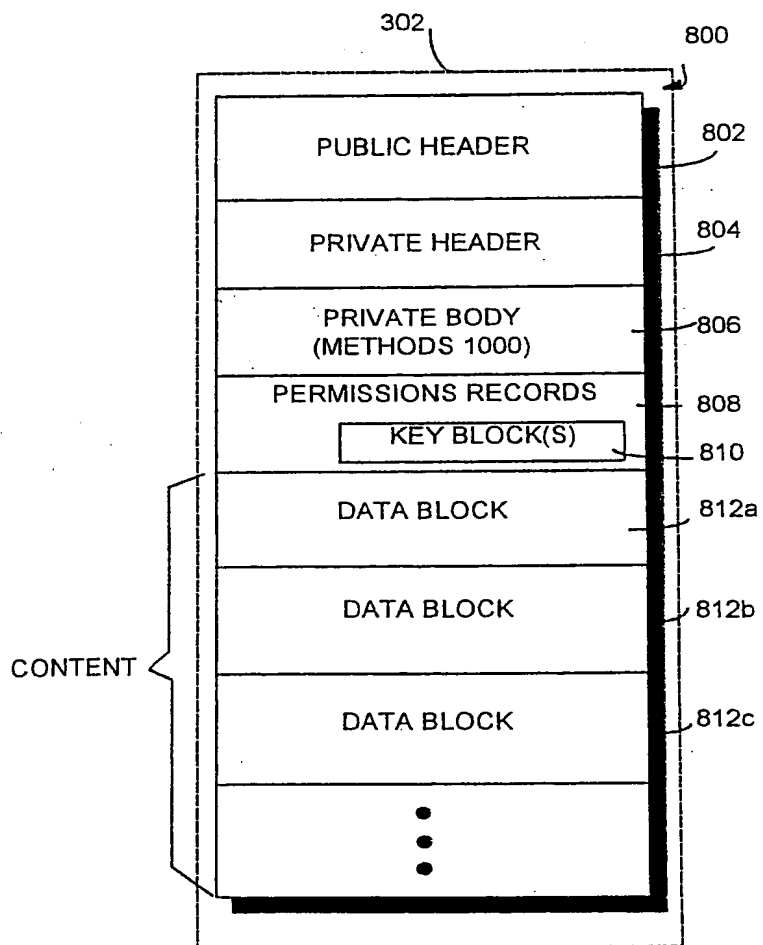


FIG. 17

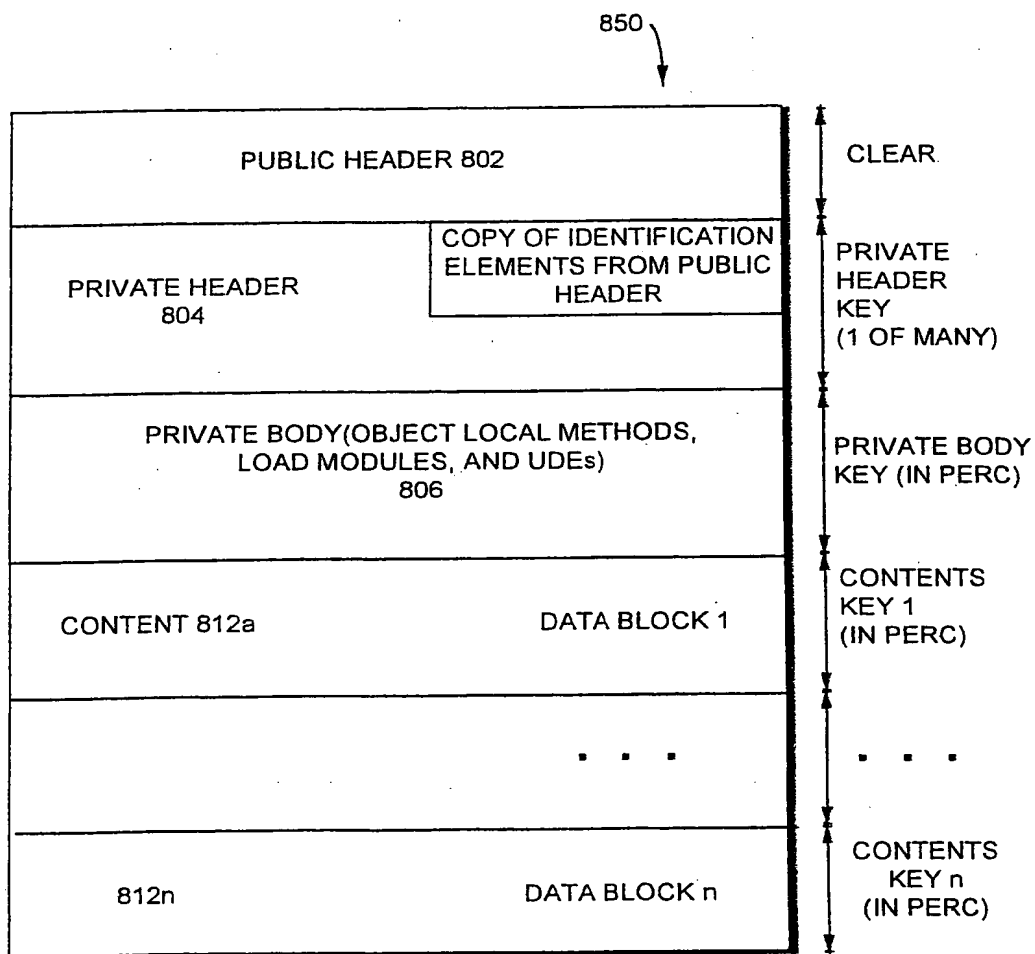


FIG. 18

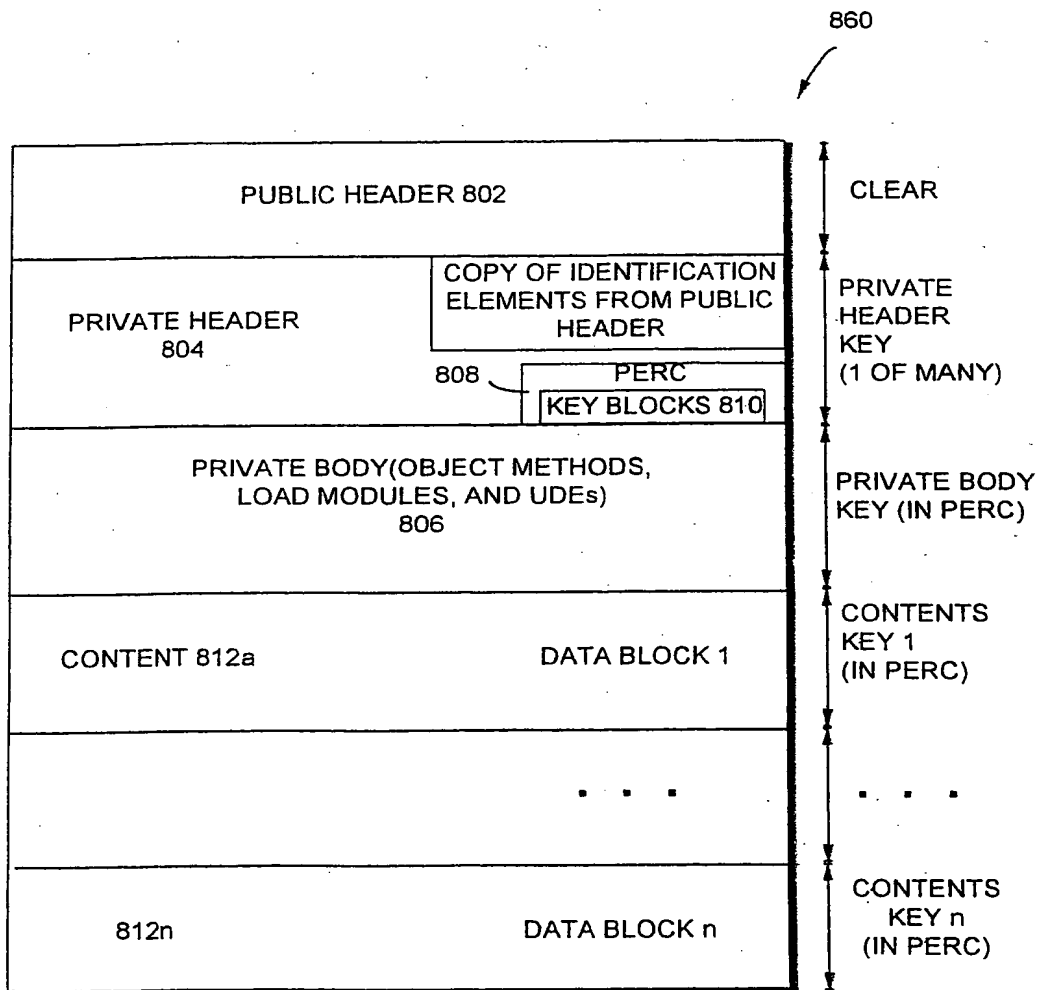


FIG. 19



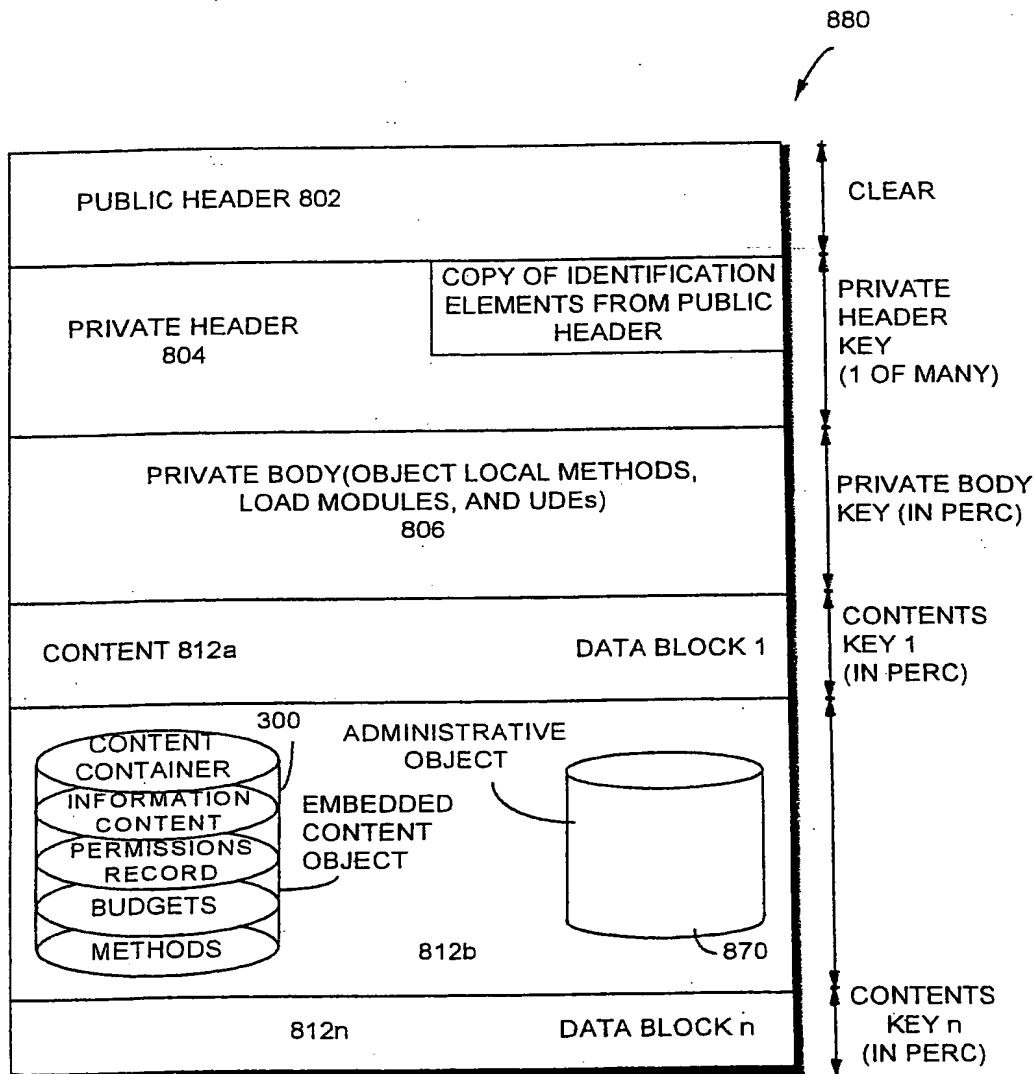


FIG. 20



REPLACEMENT SHEET  
APPLN NO.: 09/698,044

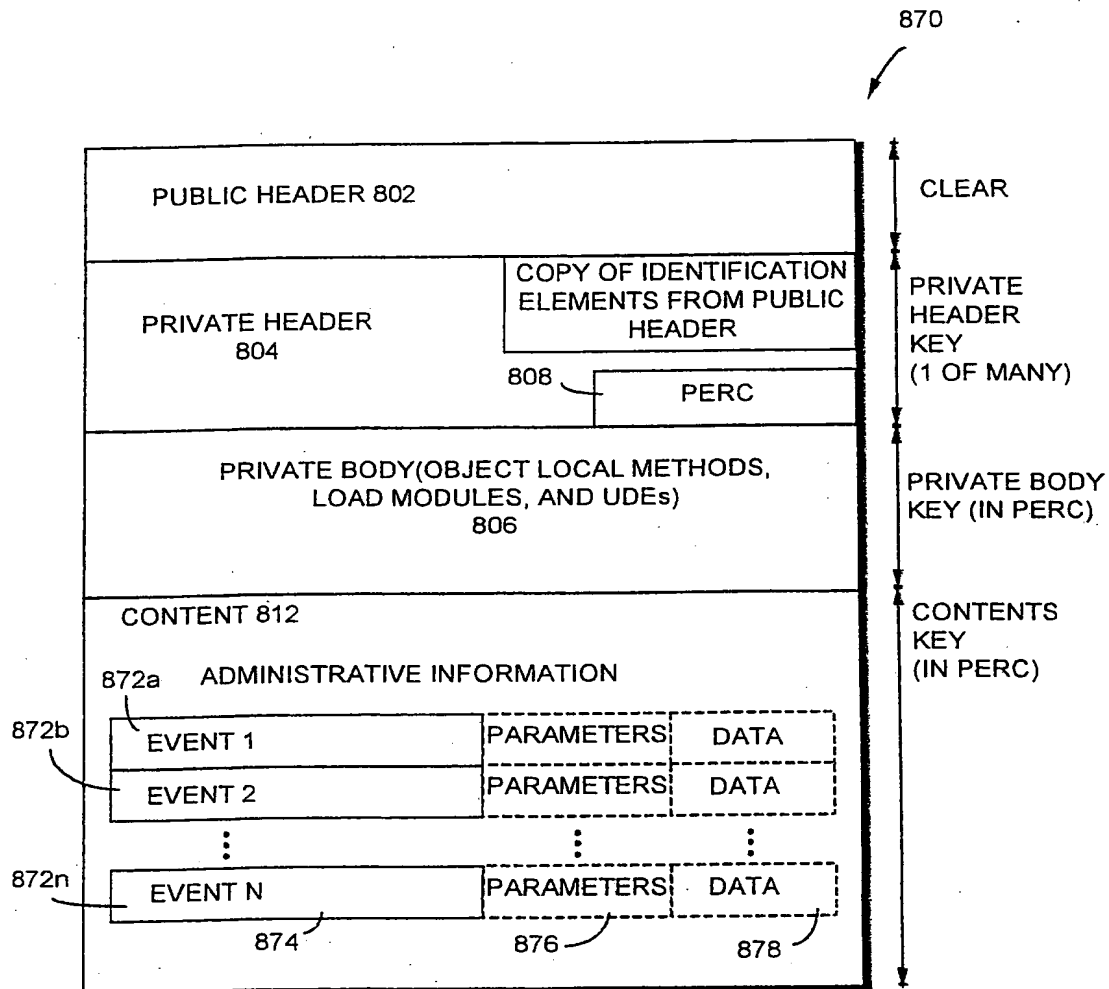


FIG. 21



FIG. 22

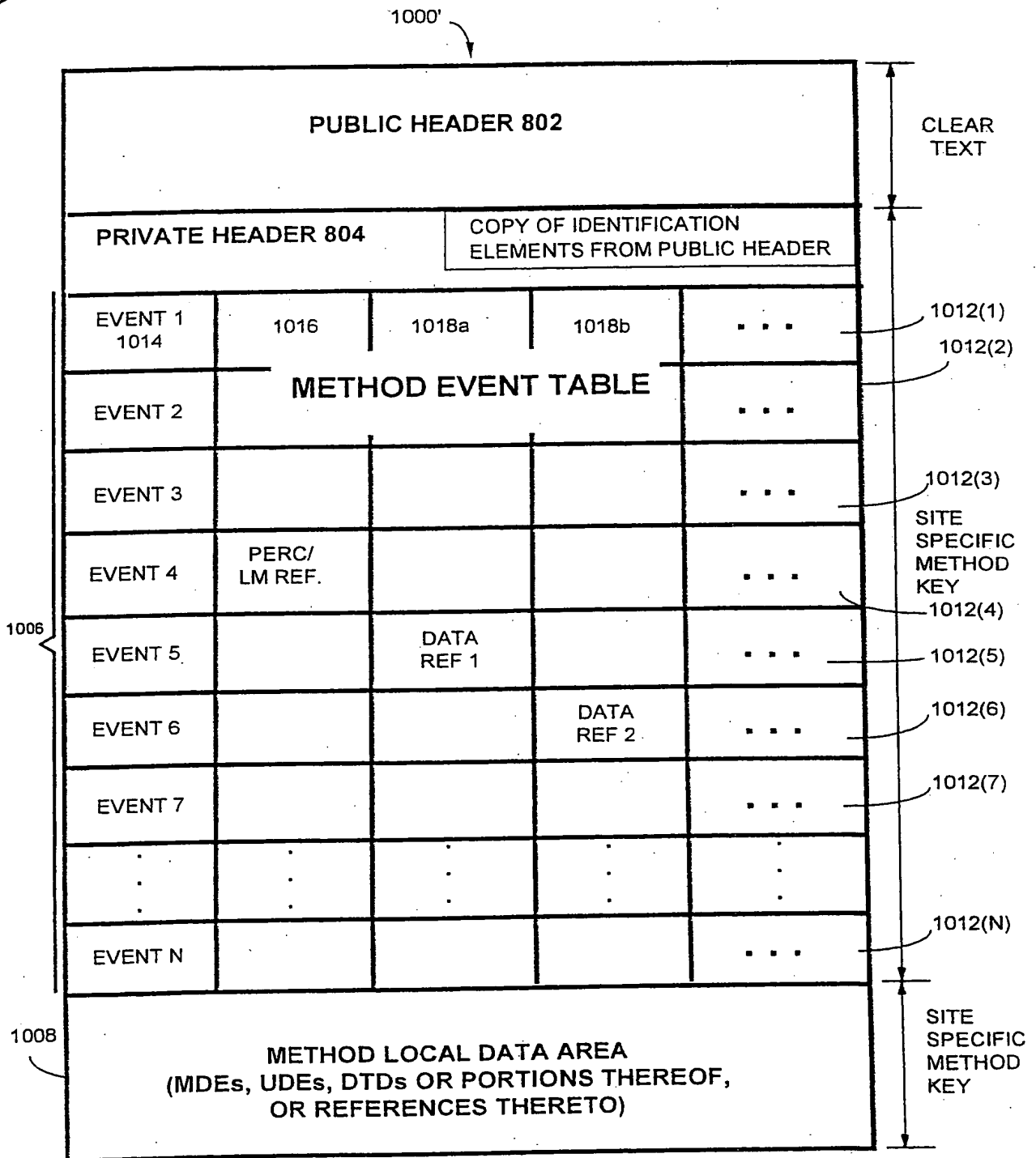




FIG. 23

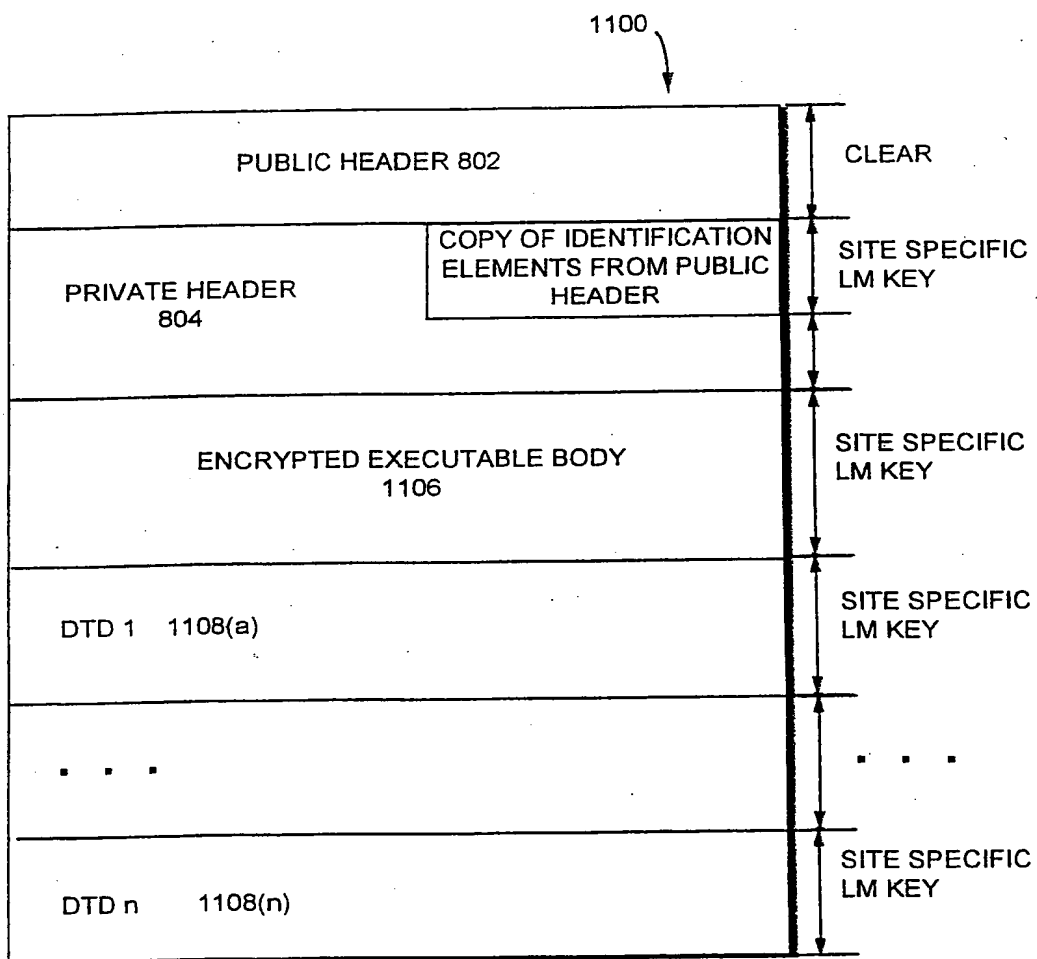




FIG. 24

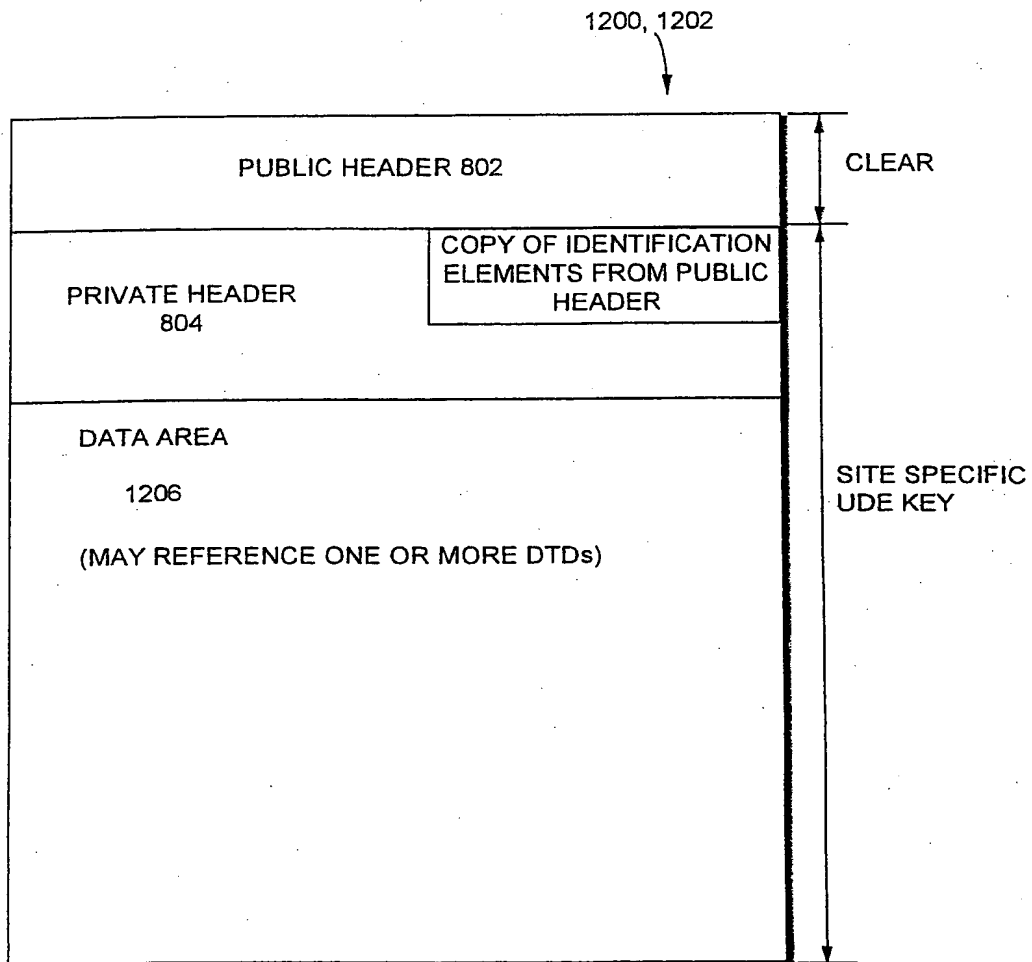




FIG. 25A

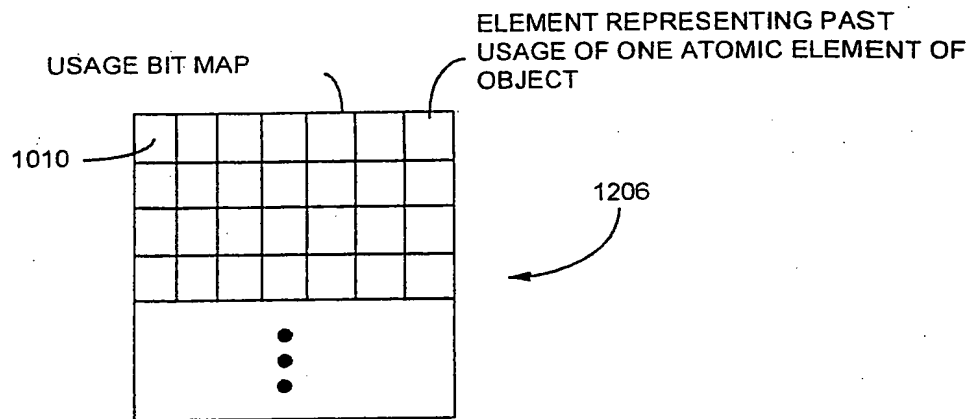


FIG. 25B

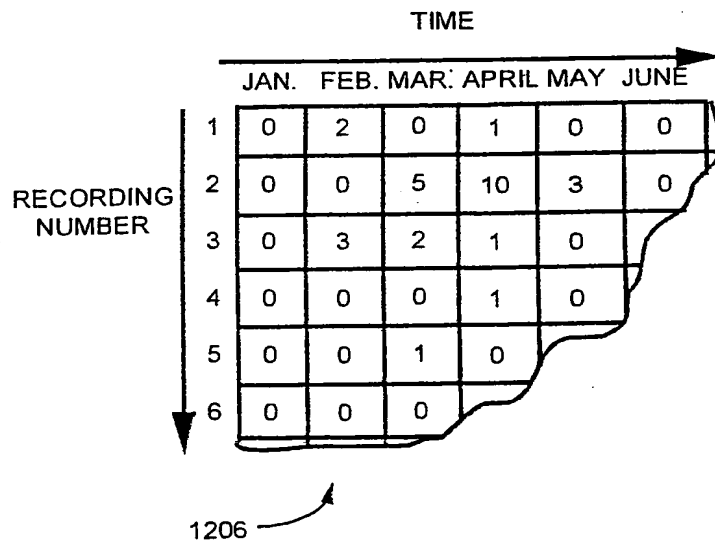




FIG. 25C

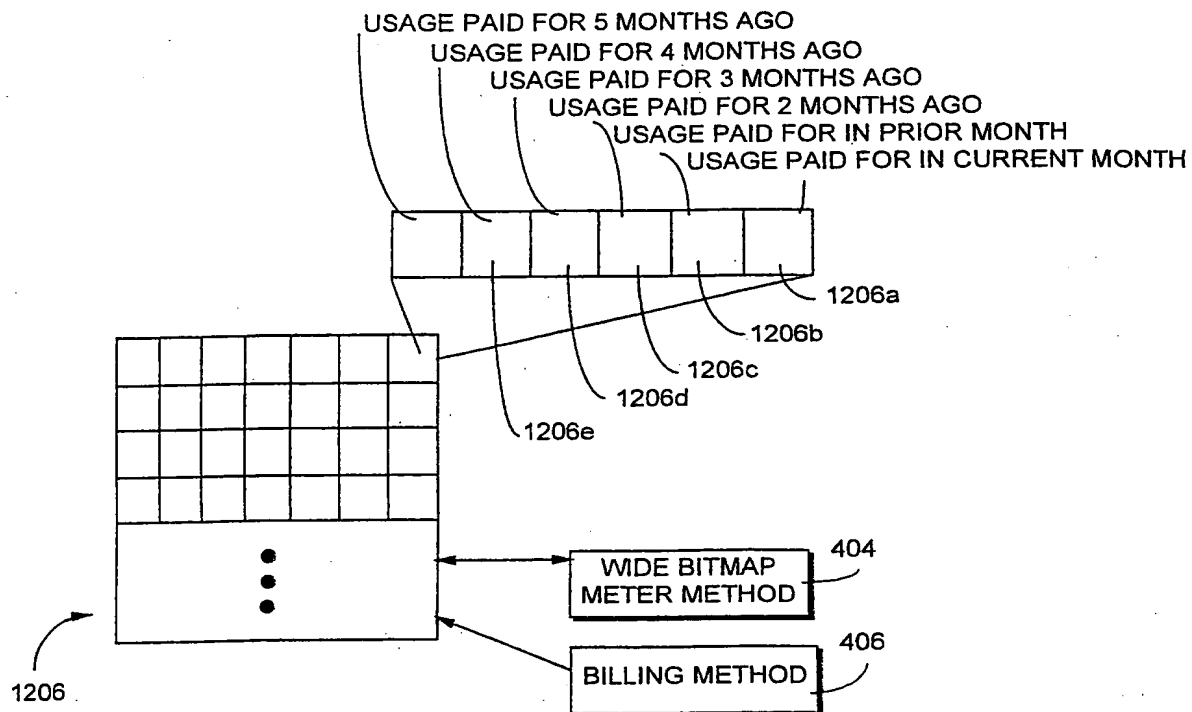




FIG. 26

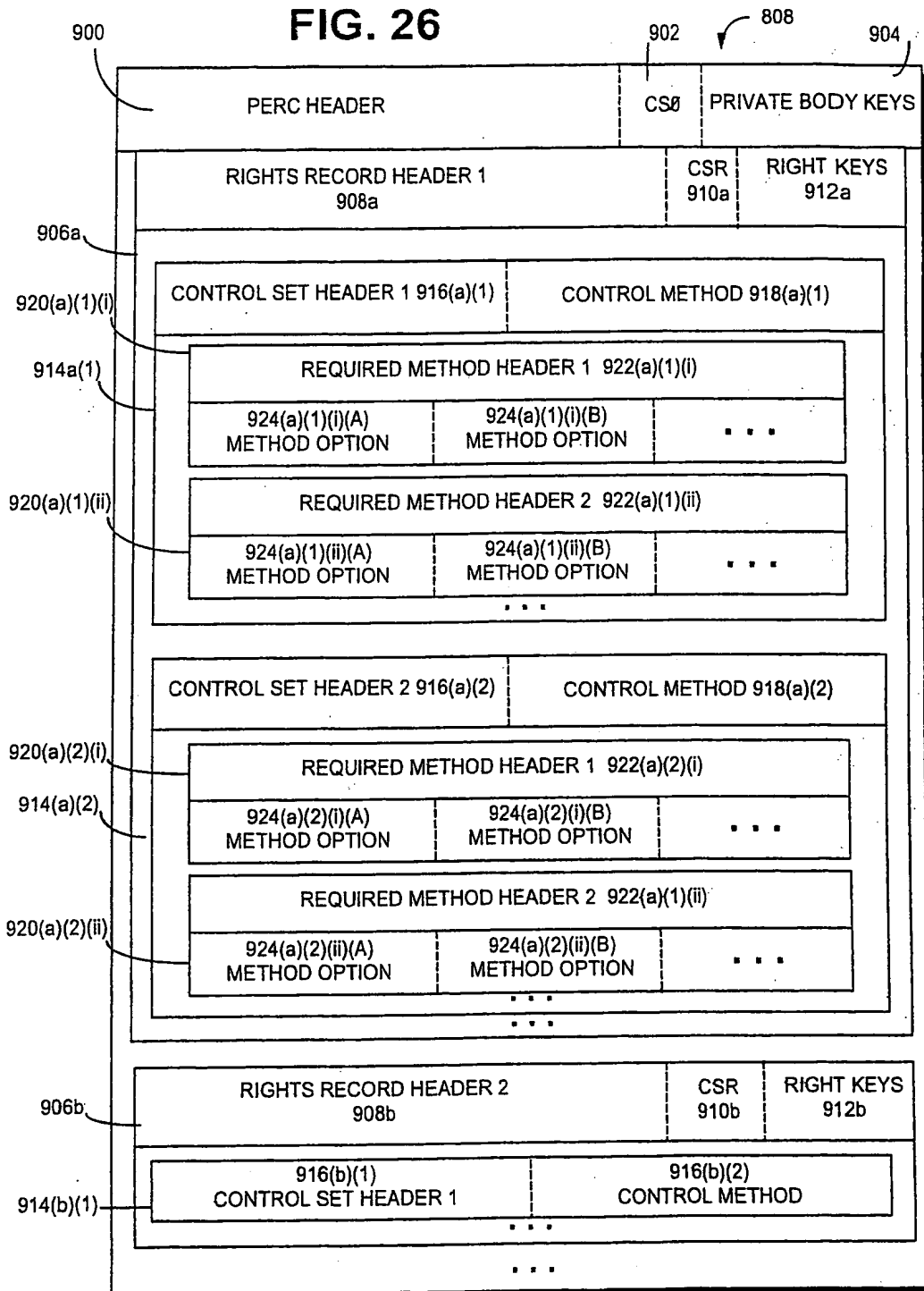






FIG. 26A

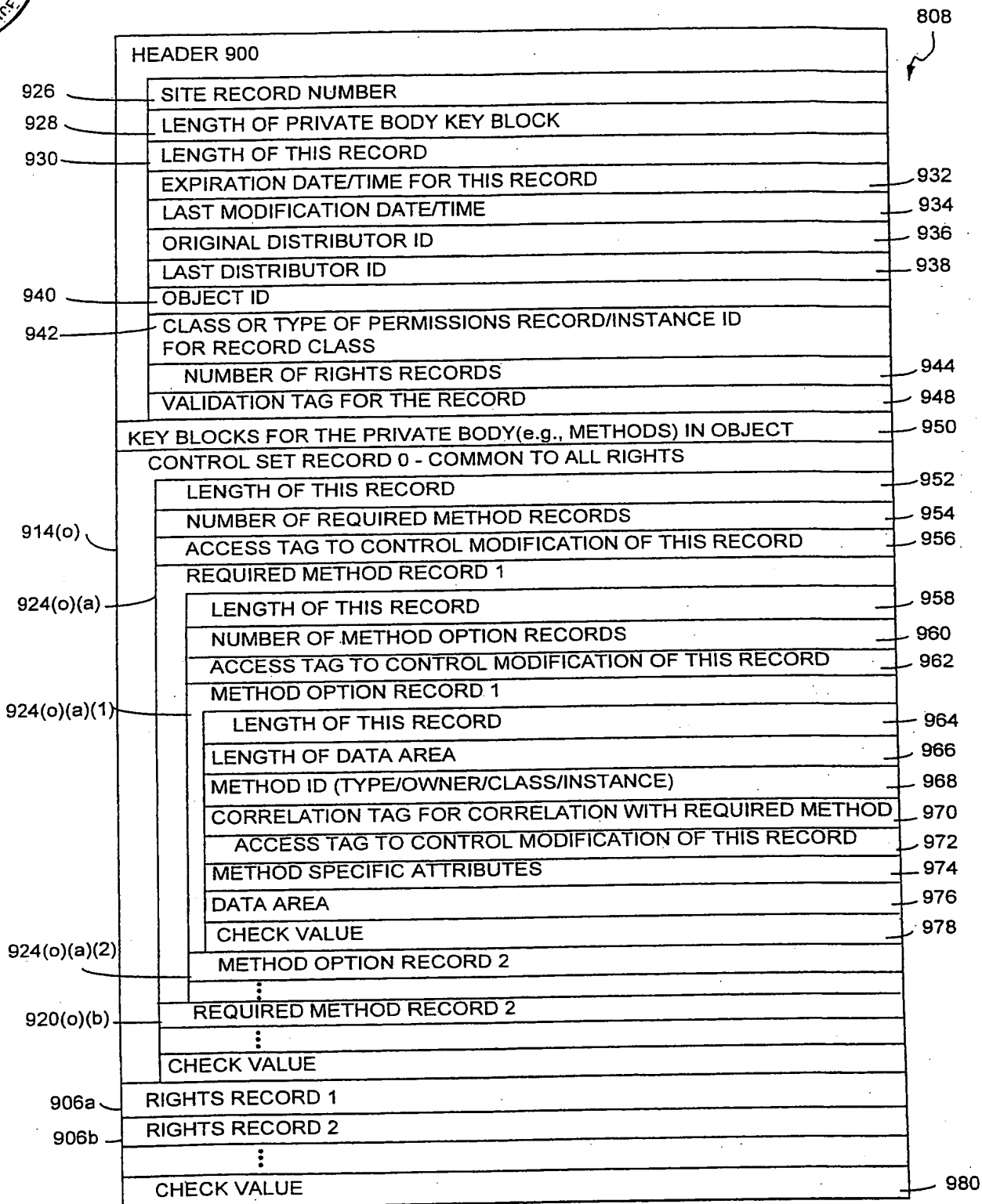
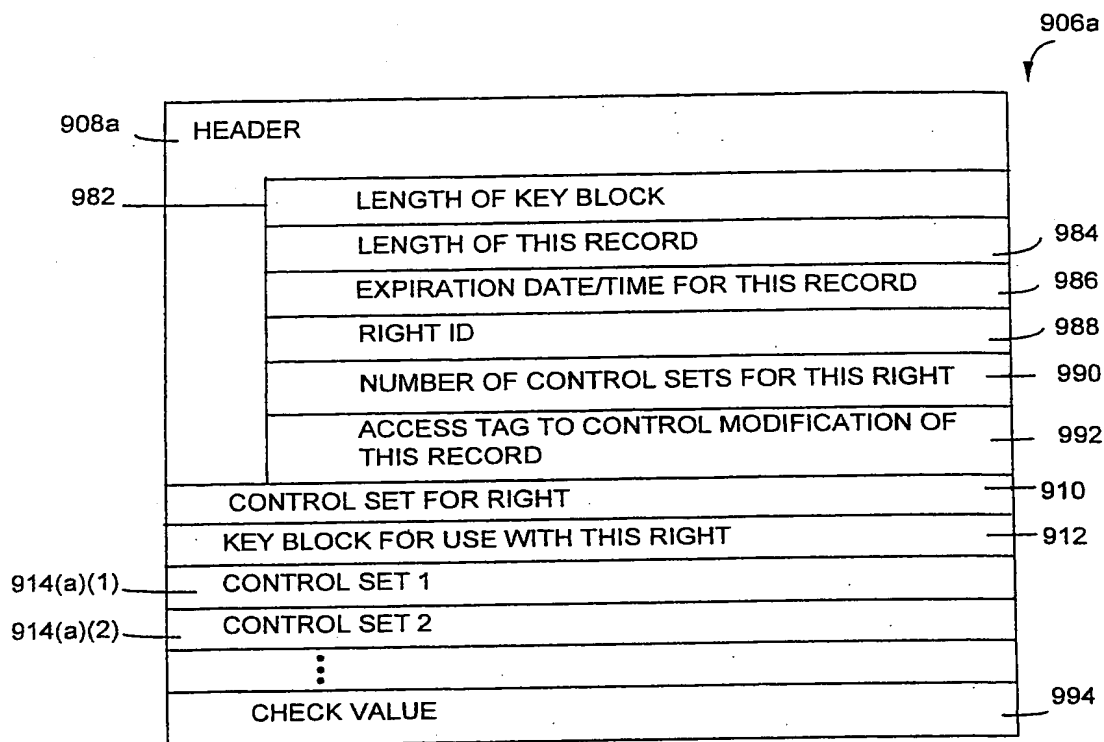




FIG. 26B





REPLACEMENT SHEET  
APPLN NO.: 09/698,044

FIG. 27

		444A(1)	
HEADER 444A	SITE RECORD NUMBER		444
	USER (GROUP) ID		444A(2)
	REF. TO "FIRST" COMPLETED OUTGOING SHIPPING RECORD		444A(3)
	REF. TO "LAST" COMPLETED OUTGOING SHIPPING RECORD		444A(4)
	REF. TO "FIRST" SCHEDULED OUTGOING SHIPPING RECORD		444A(5)
	REF. TO "LAST" SCHEDULED OUTGOING SHIPPING RECORD		444A(6)
	VALIDATION TAG FROM NAME SERVICES RECORD		444A(7)
	VALIDATION TAG FOR "FIRST" OUTGOING SHIPPING RECORD(S)		444A(8)
	CHECK VALUE		444A(9)
SHIPPING RECORD 445(1)	SITE RECORD NUMBER		445(1)(A)
	FIRST DATE/TIME FOR SCHEDULED SHIPMENT		445(1)(B)
	LAST DATE/TIME FOR SCHEDULED SHIPMENT		445(1)(C)
	ACTUAL DATE/TIME OF COMPLETED SHIPMENT		445(1)(D)
	OBJECT ID OF ADMINISTRATIVE OBJECT (TO BE) SHIPPED		445(1)(E)
	REF. TO ENTRY IN ADMINISTRATIVE EVENT LOG		445(1)(F)
	REF. TO NAME SERVICES RECORD NAMING RECIPIENT		445(1)(G)
	PURPOSE OF SHIPMENT		445(1)(H)
	STATUS OF SHIPMENT		445(1)(I)
	REF. TO "PREVIOUS" OUTGOING SHIPPING RECORD		445(1)(J)
	REF. TO "NEXT" OUTGOING SHIPPING RECORD		445(1)(K)
	VALIDATION TAG FROM HEADER		445(1)(L)
	VALIDATION TAG TO ADMINISTRATIVE EVENT LOG		445(1)(M)
	VALIDATION TAG TO NAME SERVICES RECORD		445(1)(N)
	VALIDATION TAG FROM PREVIOUS RECORD		445(1)(O)
	VALIDATION TAG TO NEXT RECORD		445(1)(P)
	CHECK VALUE		445(1)(Q)
	⋮		
	SHIPPING RECORD N		445(1)(R)

FIG. 28

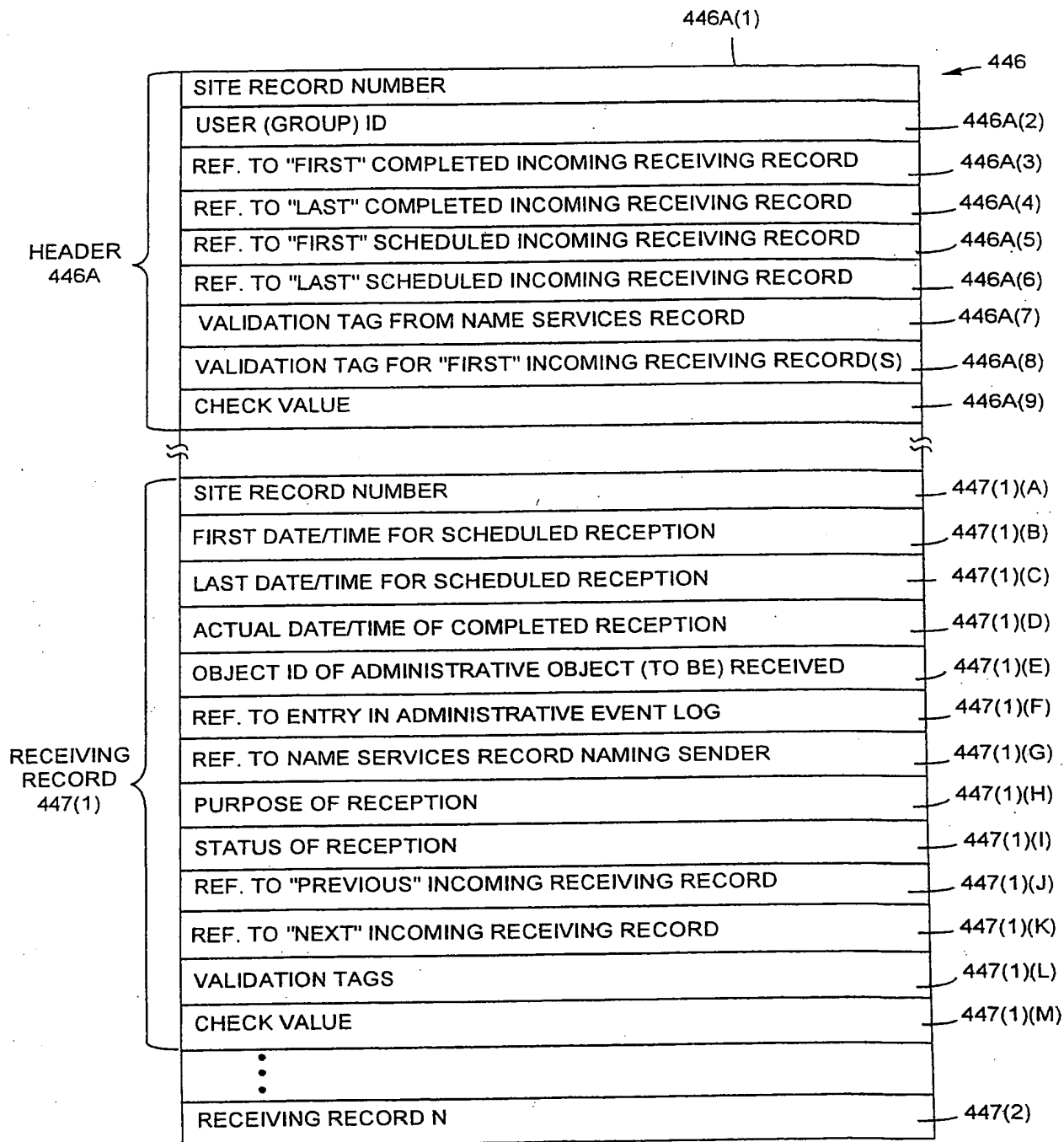




FIG. 29

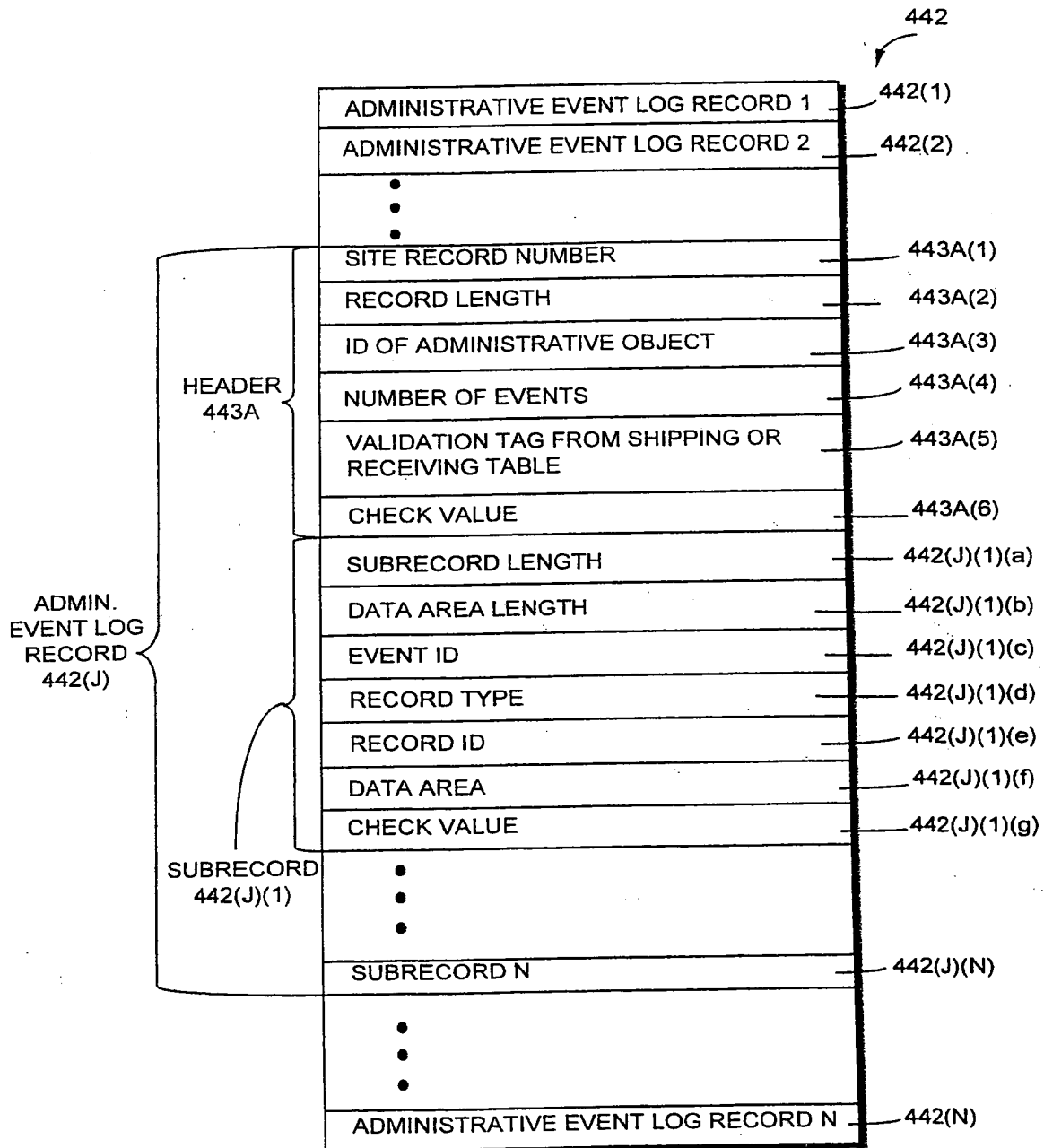
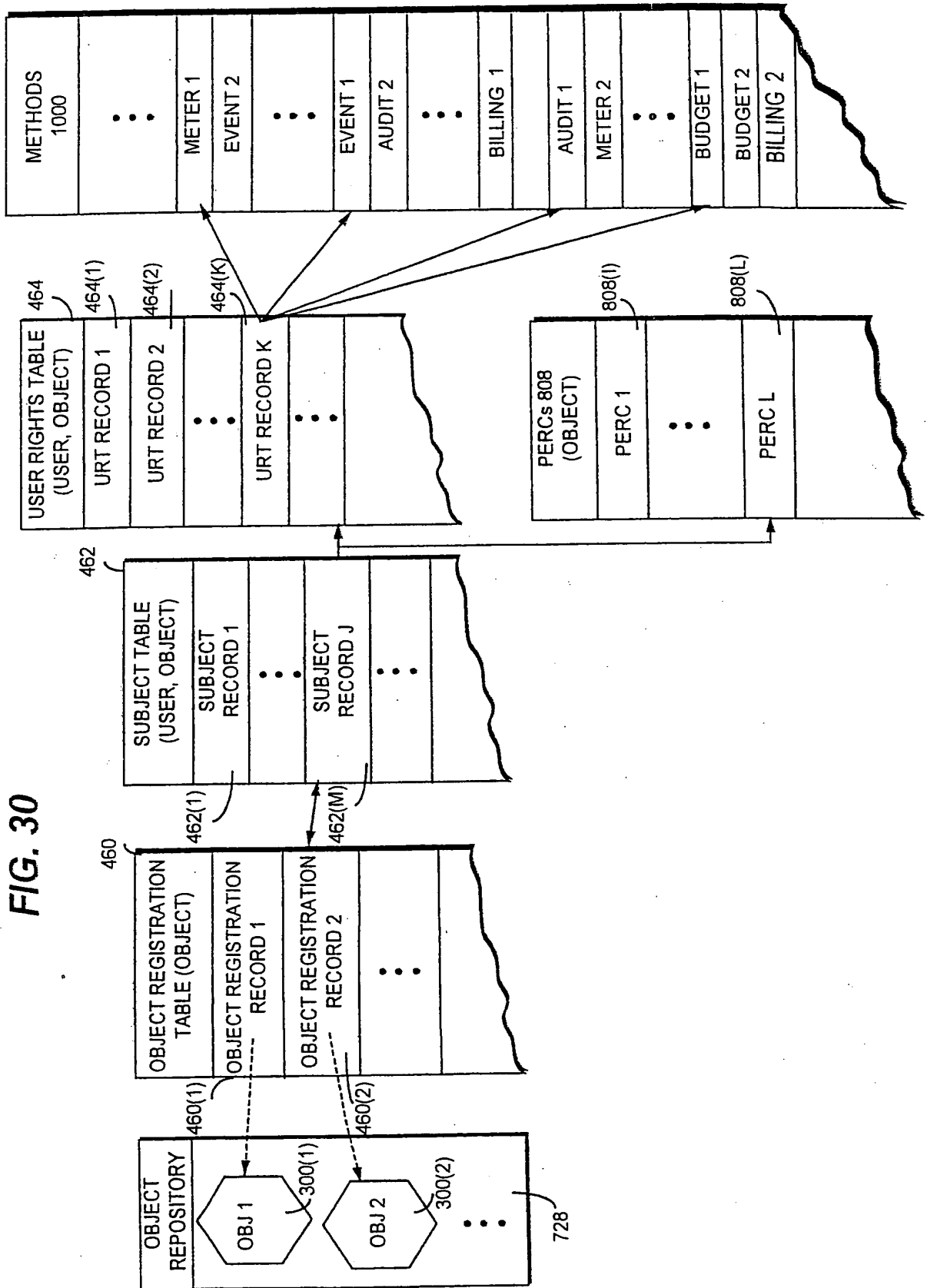


FIG. 30





REPLACEMENT SHEET  
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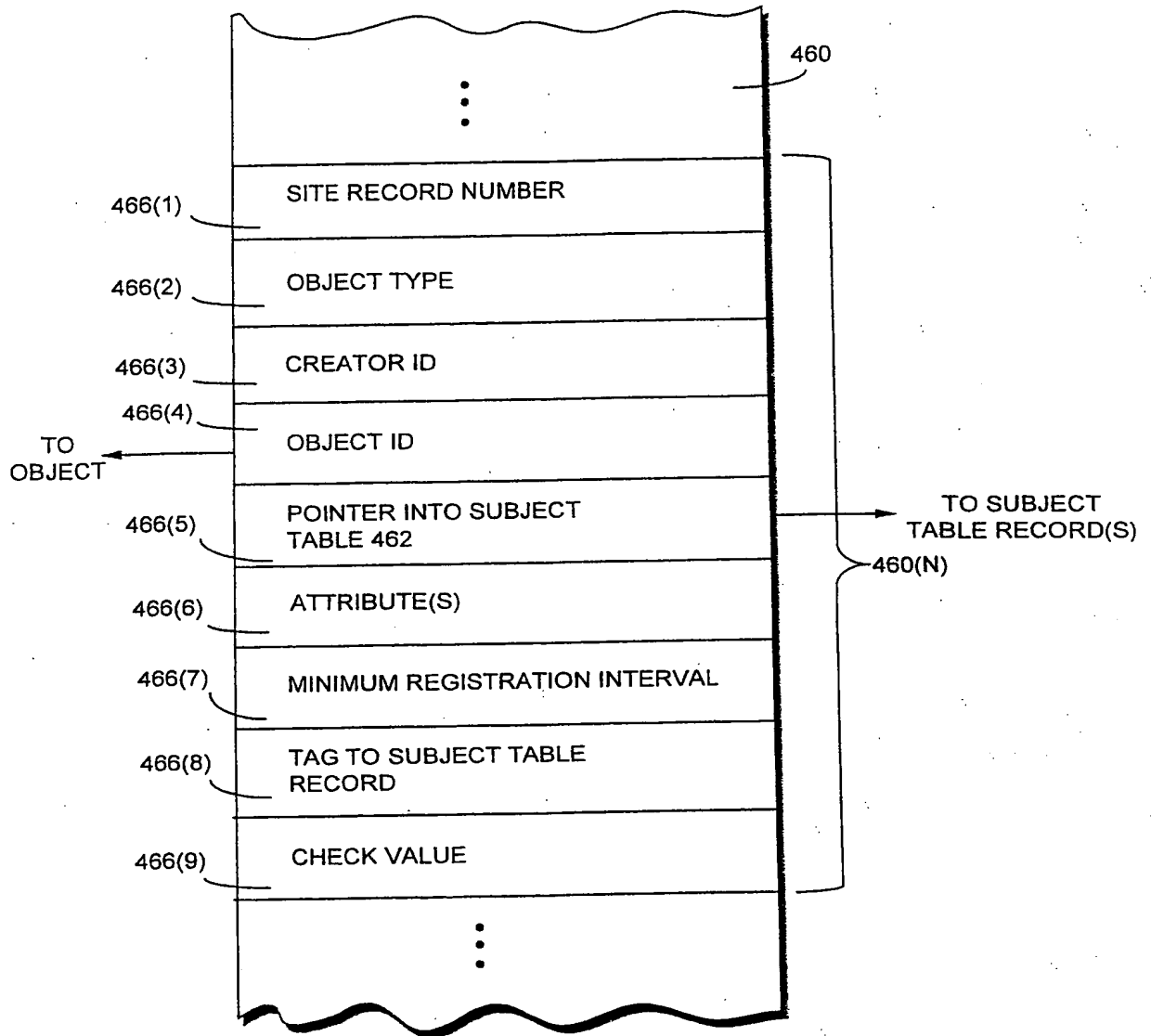
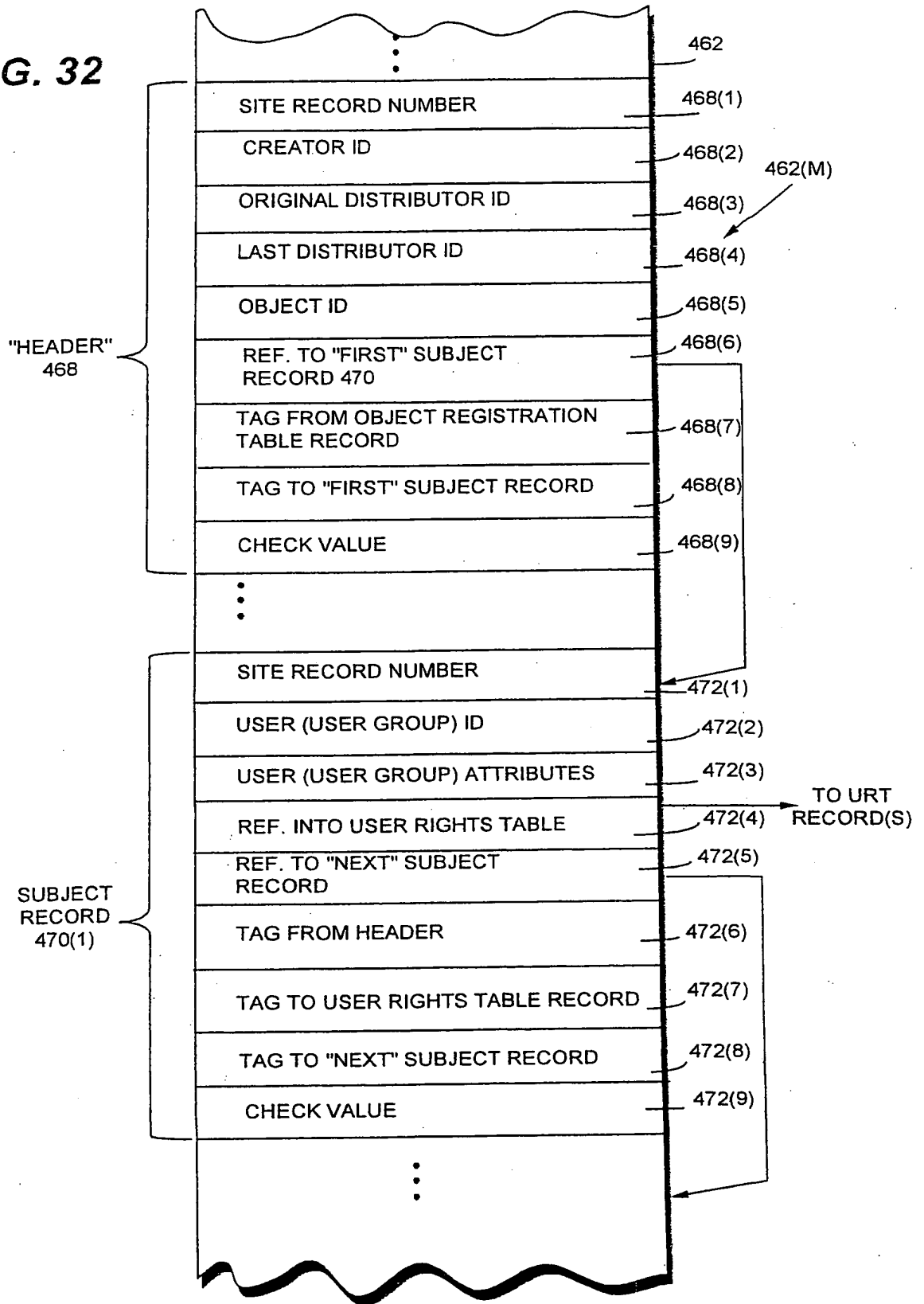


FIG. 31

REPLACEMENT SHEET  
APPLN NO.: 09/698,044

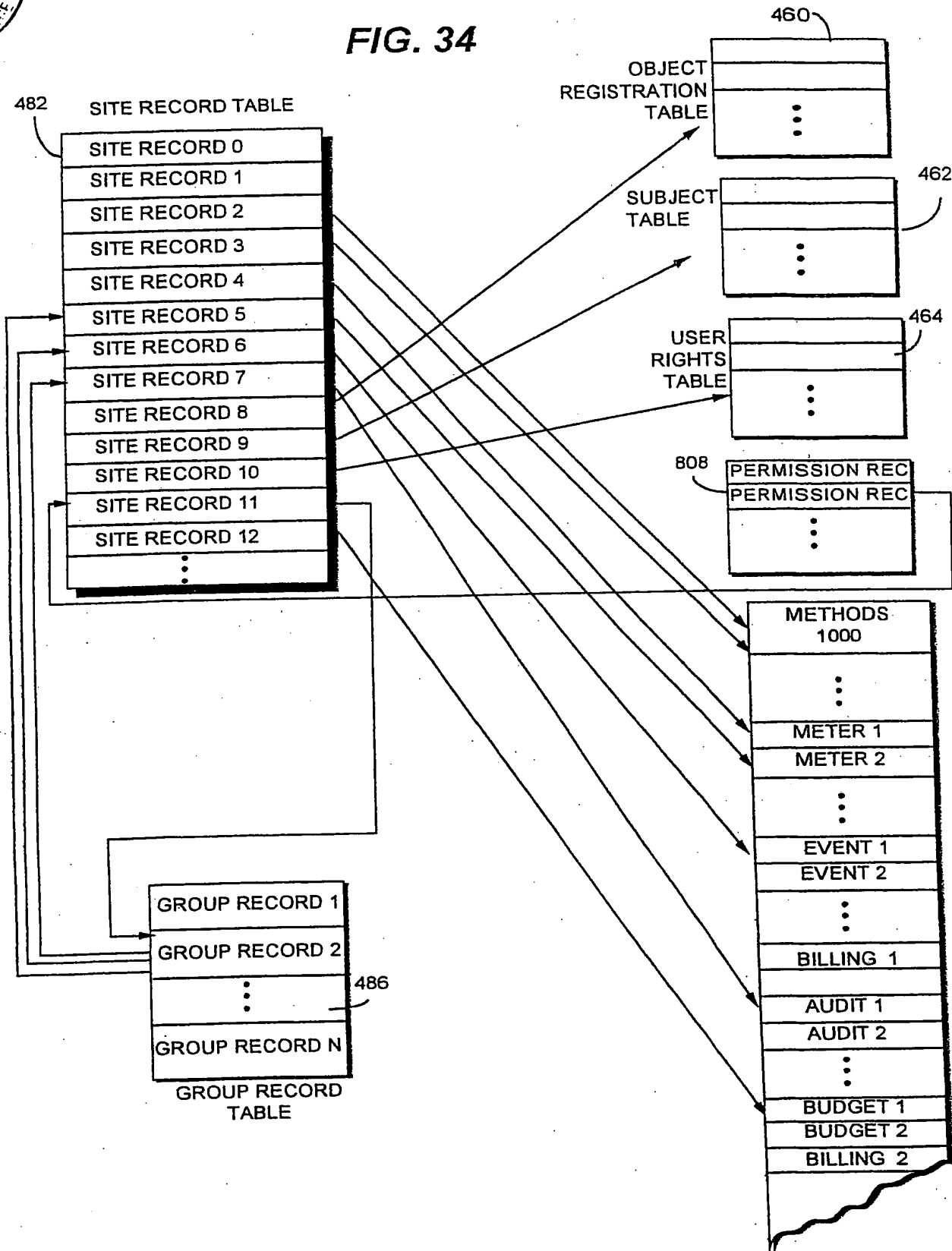
FIG. 32





		464	
FROM SUBJECT TABLE  474	URT HEADER	SITE RECORD NUMBER	474(1)
		NUMBER OF RIGHTS RECORDS	474(2)
		REF. TO "FIRST" RIGHT RECORD	474(3)
		TAG FROM SUBJECT TABLE	474(4)
		TAG TO RIGHTS RECORD	474(5)
		CHECK VALUE	474(6)
		476(1)	
476	RIGHTS RECORD HEADER	SITE RECORD NUMBER FOR THIS RIGHTS RECORD	476(1)
		RIGHT ID	476(2)
		POINTER TO "NEXT" RIGHTS RECORD	476(3)
		POINTER TO "FIRST" SET OF USER CHOICE RECORDS	476(4)
		TAG FROM URT HEADER	476(5)
		TAG TO "FIRST" SET OF USER CHOICE RECORDS	476(6)
		CHECK VALUE	476(7)
		478(1)	
478	SET OF USER CHOICE RECORDS	SITE RECORD NUMBER FOR THIS USER CHOICE RECORD	478(1)
		USER(USER GROUP) ID	478(2)
		ATTRIBUTES	478(3)
		REF. TO "NEXT" SET OF USER CHOICE RECORDS	478(4)
		NUMBER OF USER CHOICES	478(5)
		TAG FROM RIGHTS RECORD HEADER	478(6)
		USER CHOICE RECORD 1	480(1)
		USER CHOICE RECORD 2	480(2)
		...	
		USER CHOICE RECORD N	480(N)
		CHECK VALUE	

FIG. 34





**FIG. 34A**

482(J)		482
TYPE OF RECORD		484(1)
OWNER OR CREATOR OF RECORD		484(2)
CLASS		484(3)
INSTANCE		484(4)
TYPE SPECIFIC DESCRIPTOR (e.g., OBJECT ID) ASSOCIATED WITH RECORD		484(5)
TABLE IN WHICH THE RECORD IS LOCATED		484(6)
POINTER - OFFSET, WITHIN THE TABLE, TO WHERE THE RECORD BEGINS		484(7)
RECORD LENGTH		484(8)
VALIDATION TAG FOR RECORD		484(9)
CHECK VALUE		484(10)



**FIG. 34B**

		486
486(J)		
SITE RECORD NUMBER		488(1)
NUMBER OF REFERENCE SUBRECORDS		488(2)
VALIDATION TAG FOR GROUP OF RECORDS		488(3)
REFERENCE SUBRECORD 1		488(4)
REF.(SITE RECORD NUMBER 1) FOR 1ST RECORD IN GROUP		490(A)
VALIDATION TAG FOR RECORD		490(B)
REFERENCE SUBRECORD 2		488(5)
REF.(SITE RECORD NUMBER 2) FOR 1ST RECORD IN GROUP		490(C)
VALIDATION TAG FOR RECORD		490(D)
⋮		
CHECKSUM (CRC)		488(6)



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FIG. 35

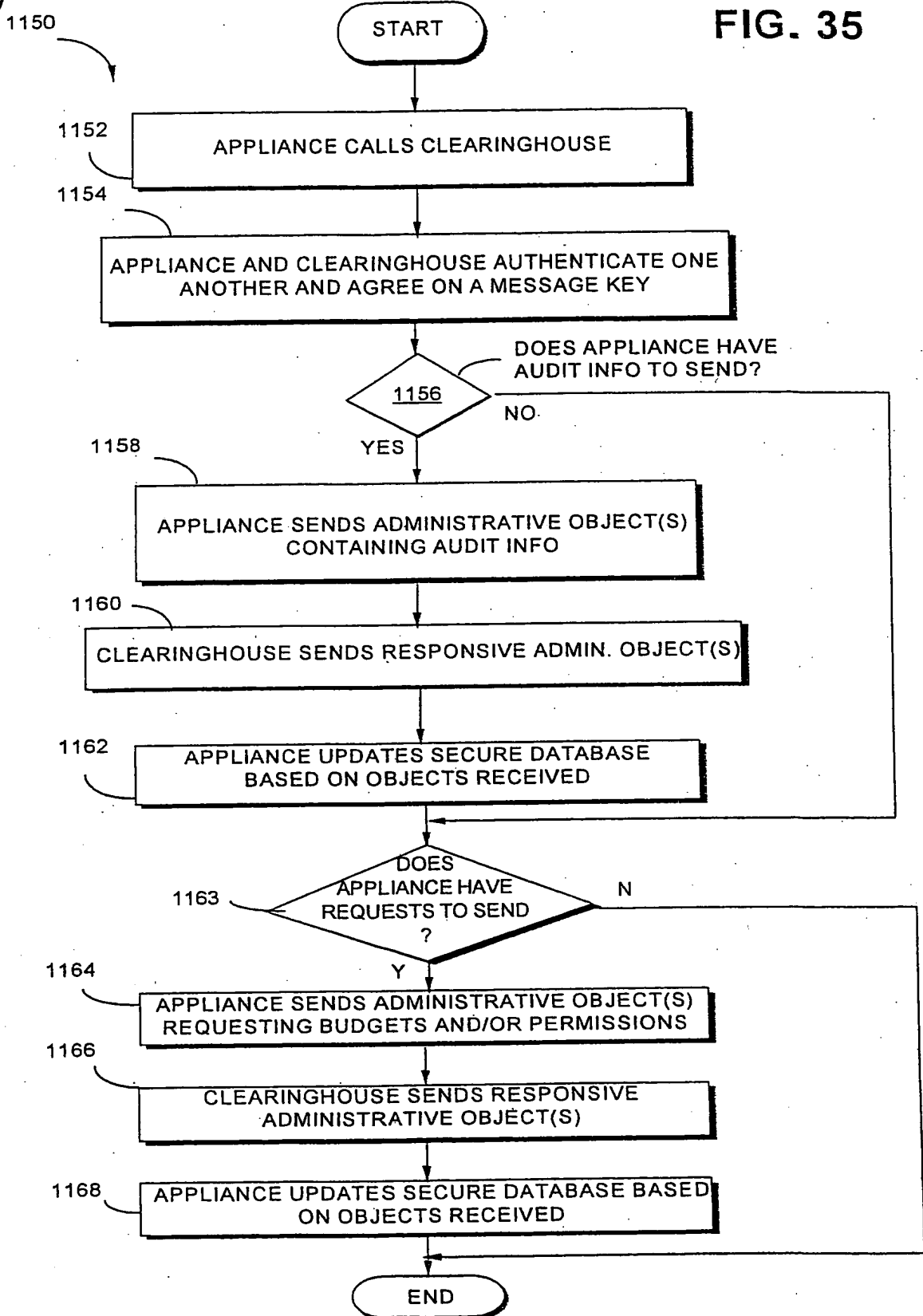




FIG. 36

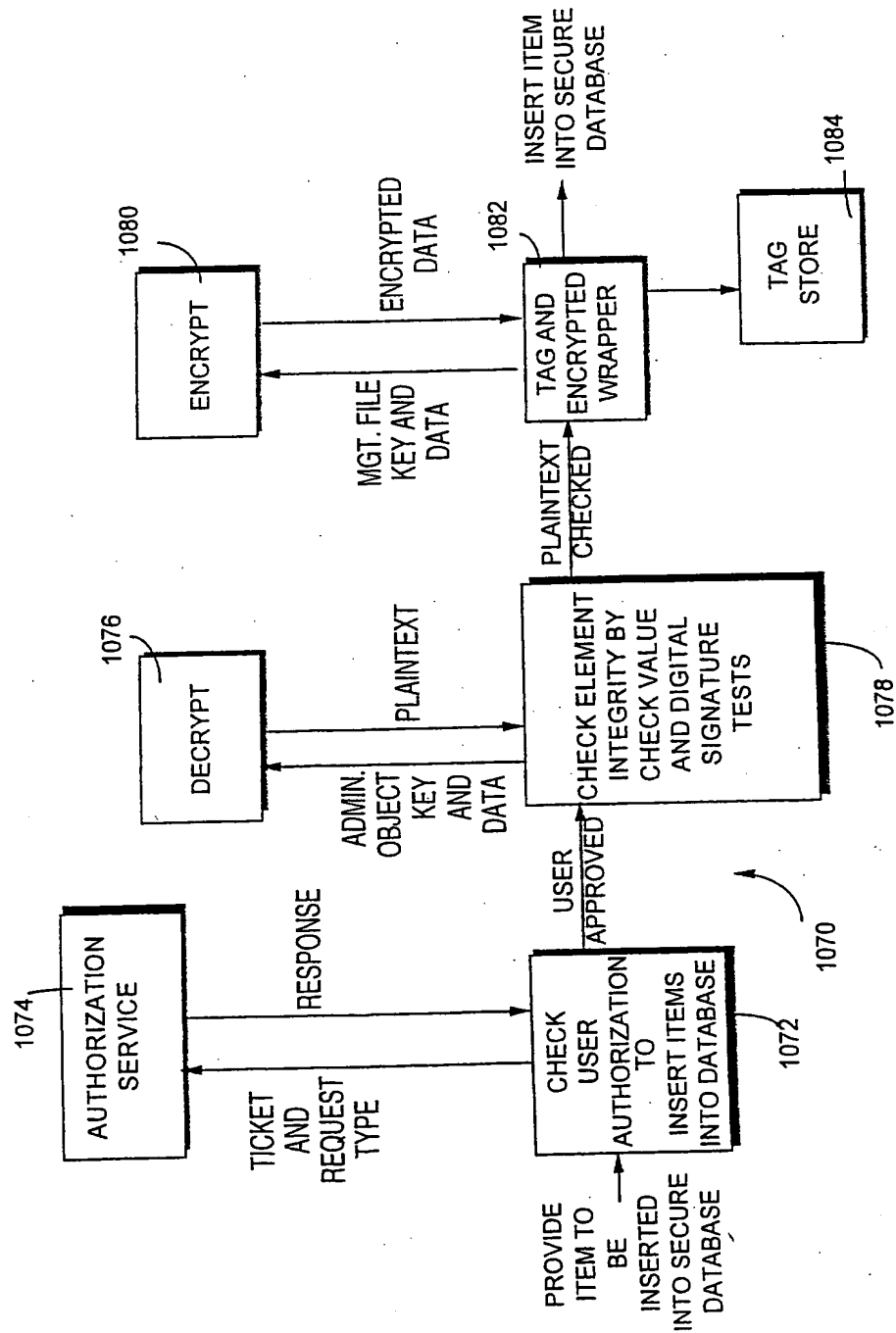




FIG. 37

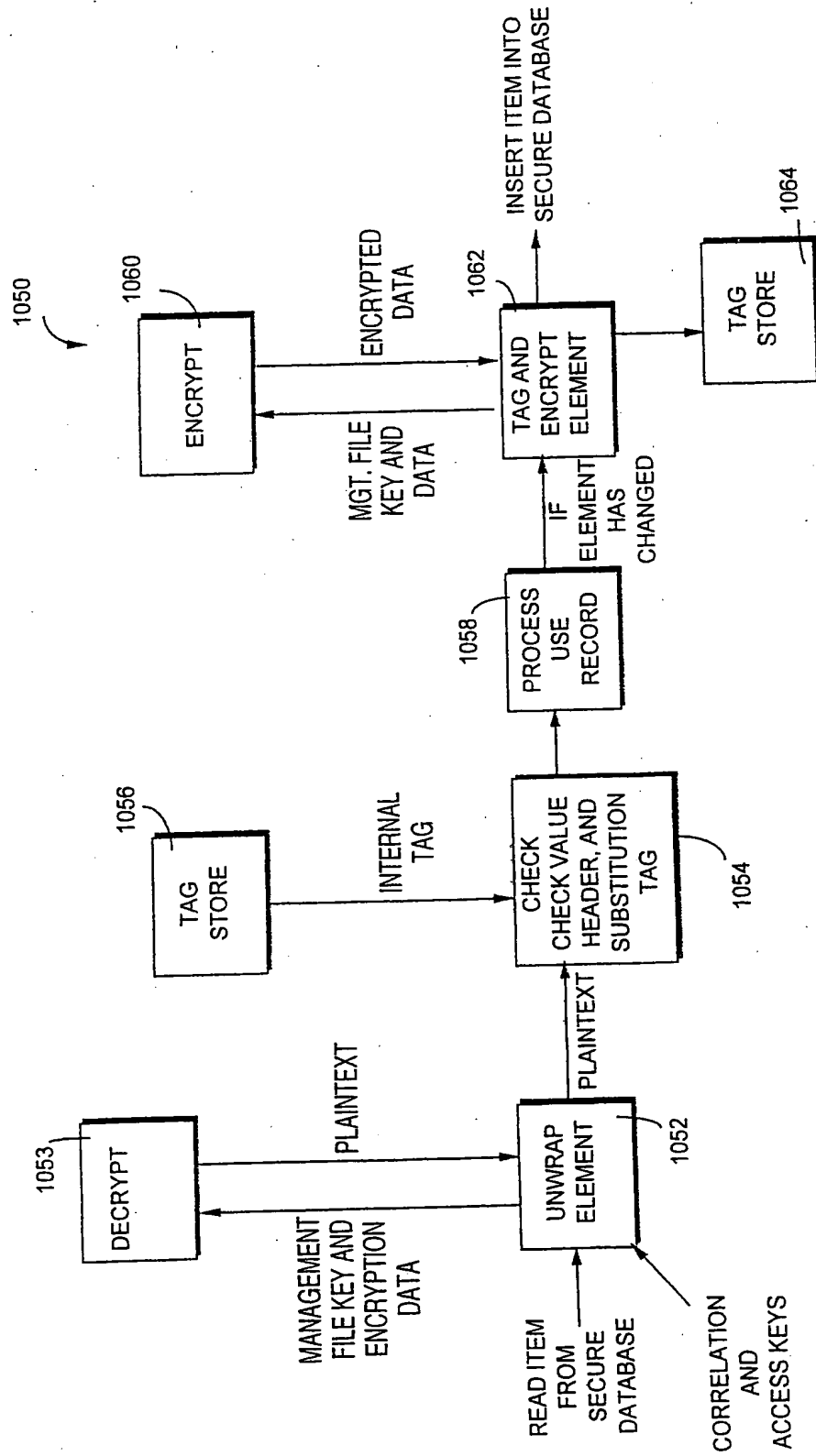




FIG. 38

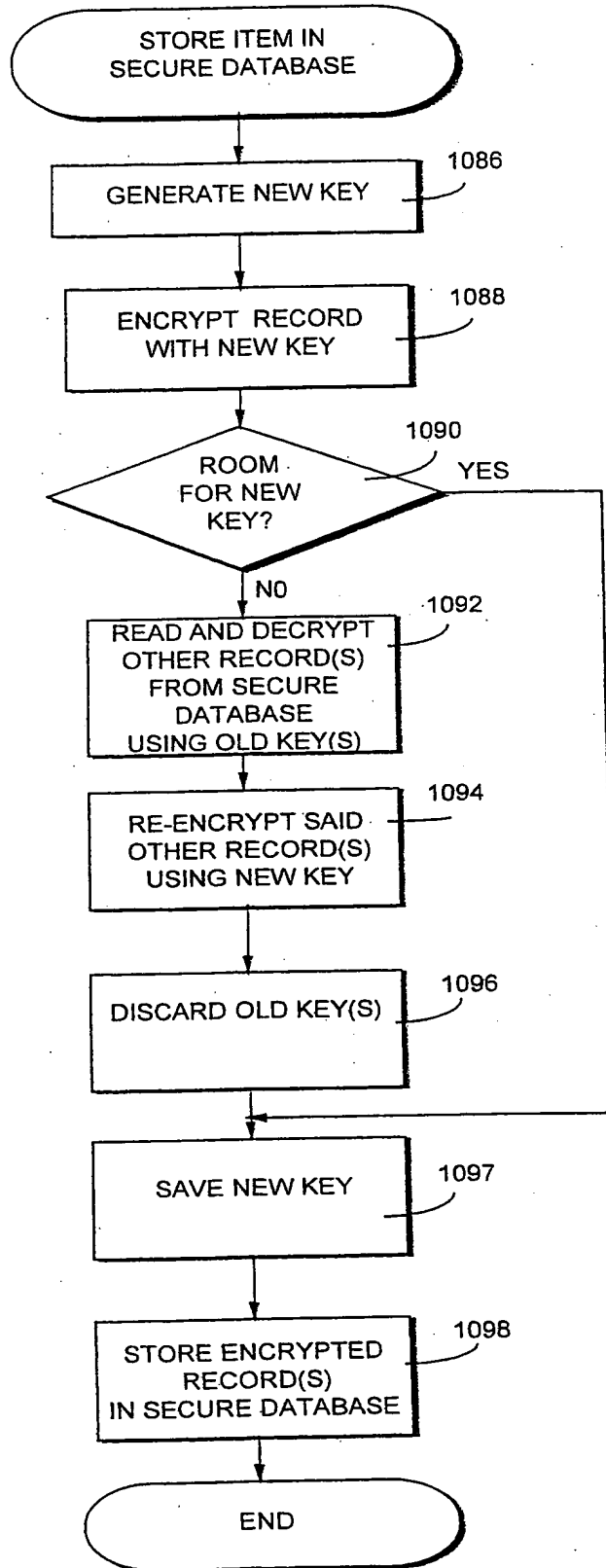






FIG. 39

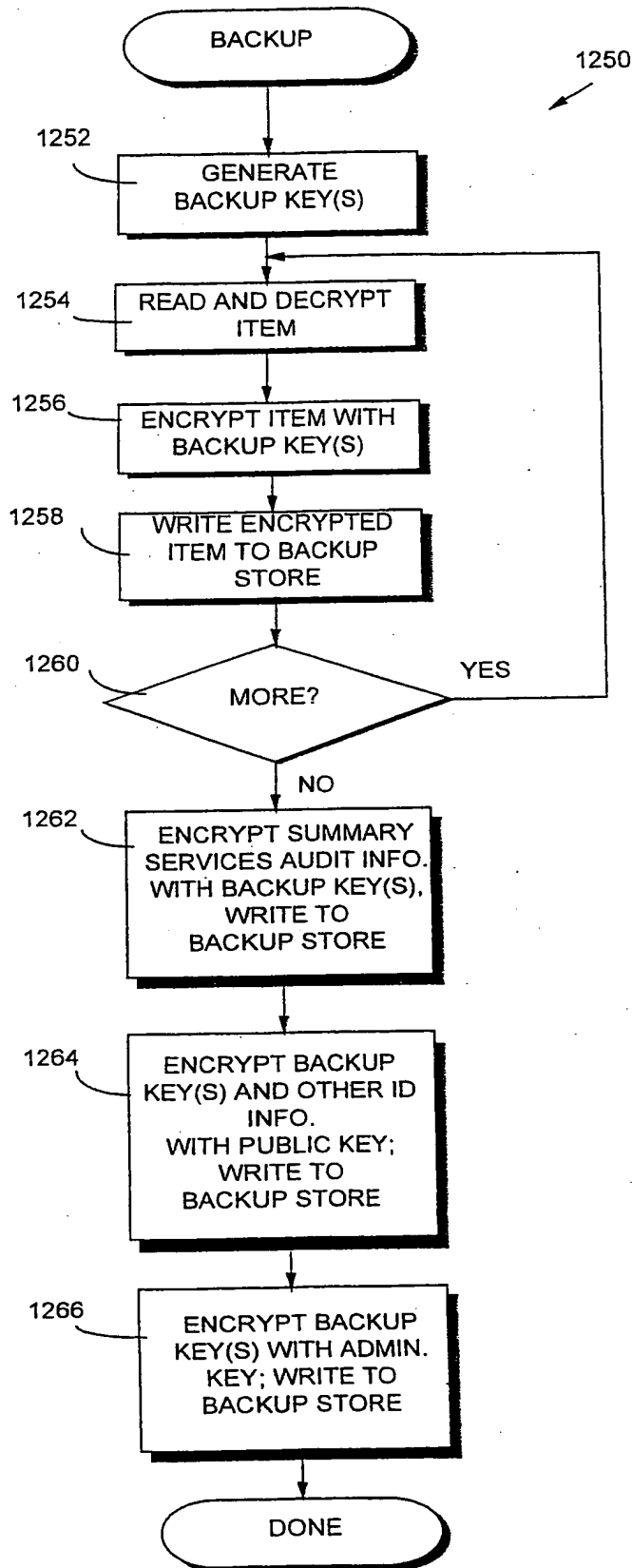
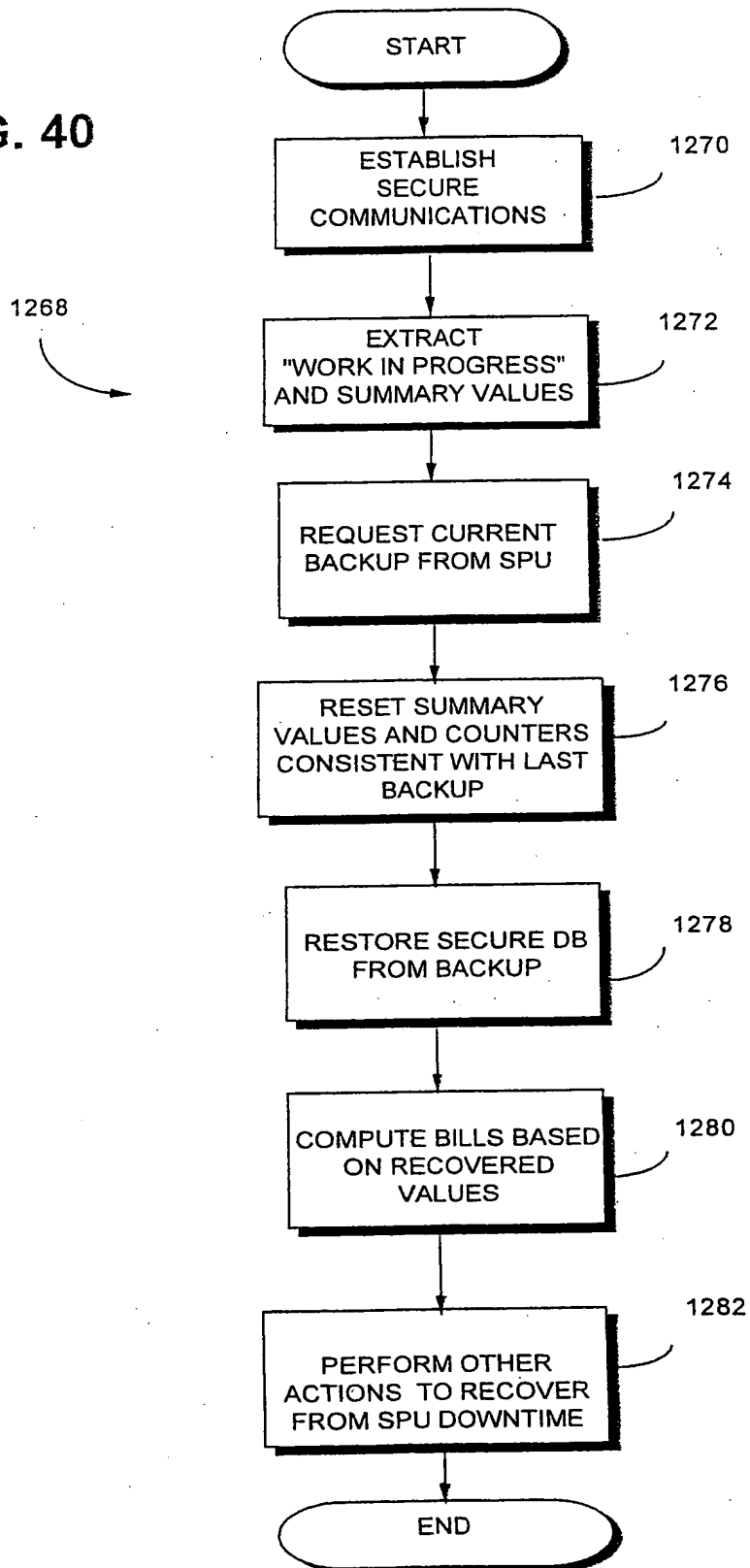




FIG. 40



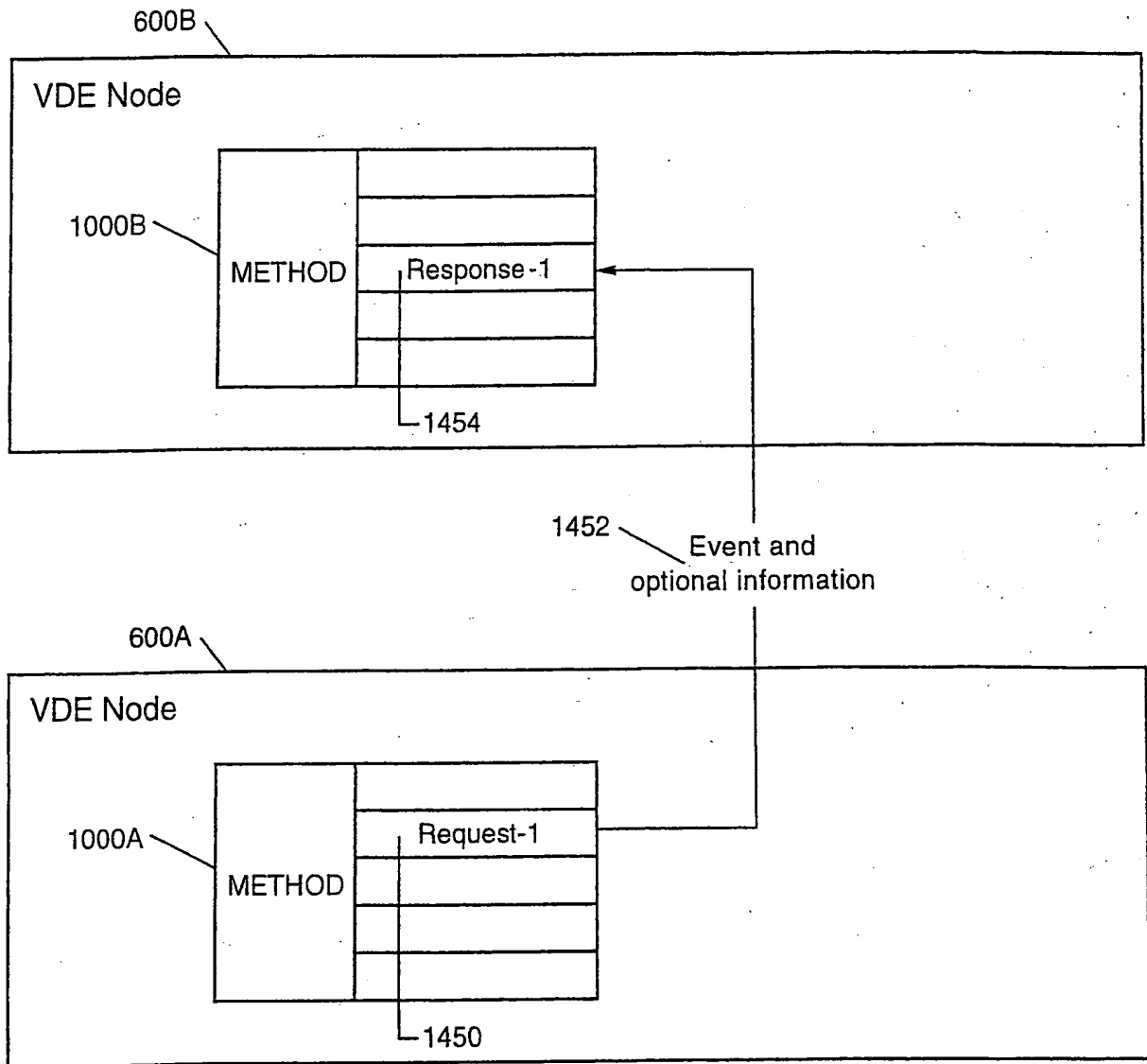


FIG. 41a

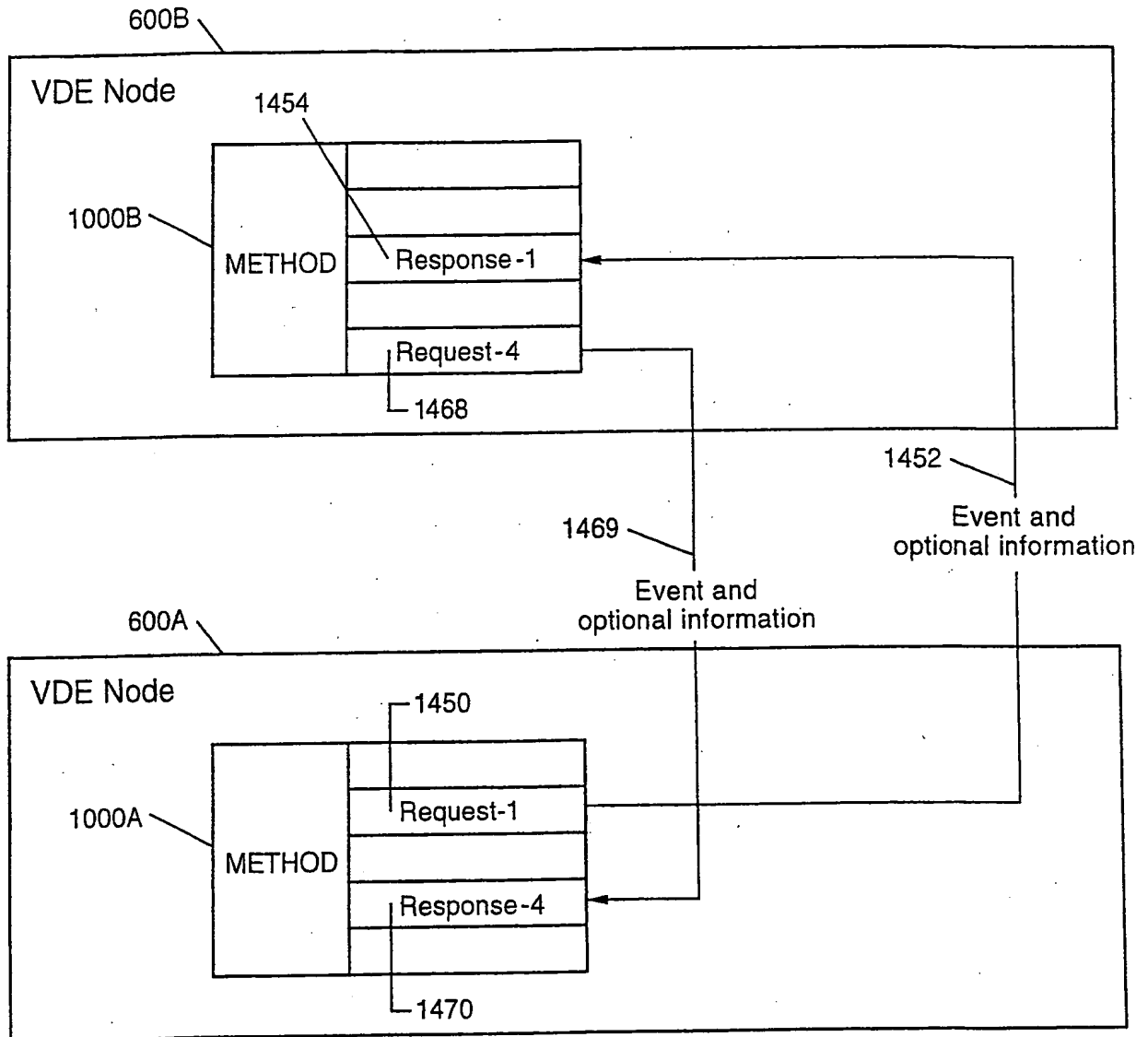


FIG. 41b



FIG. 41c

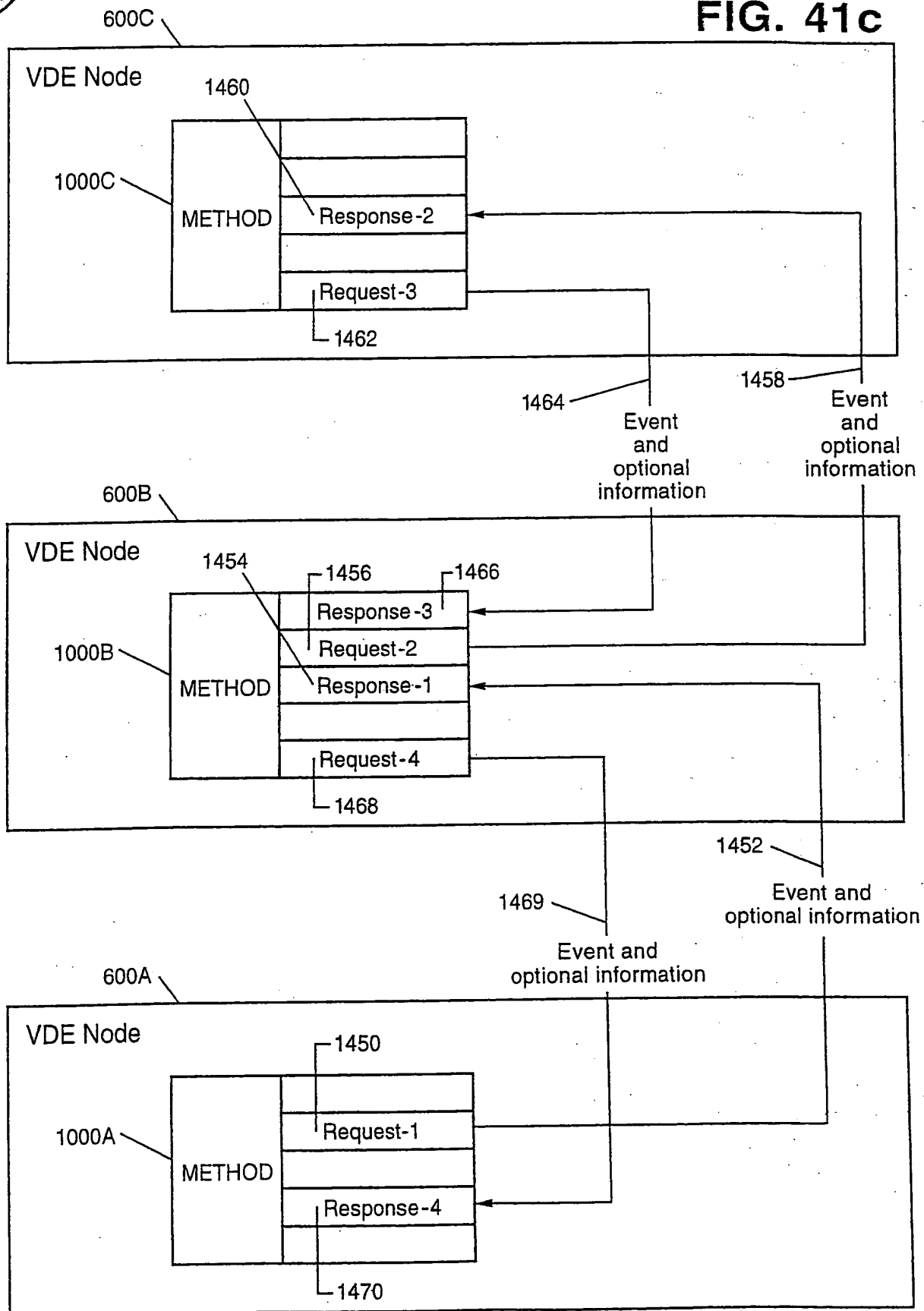
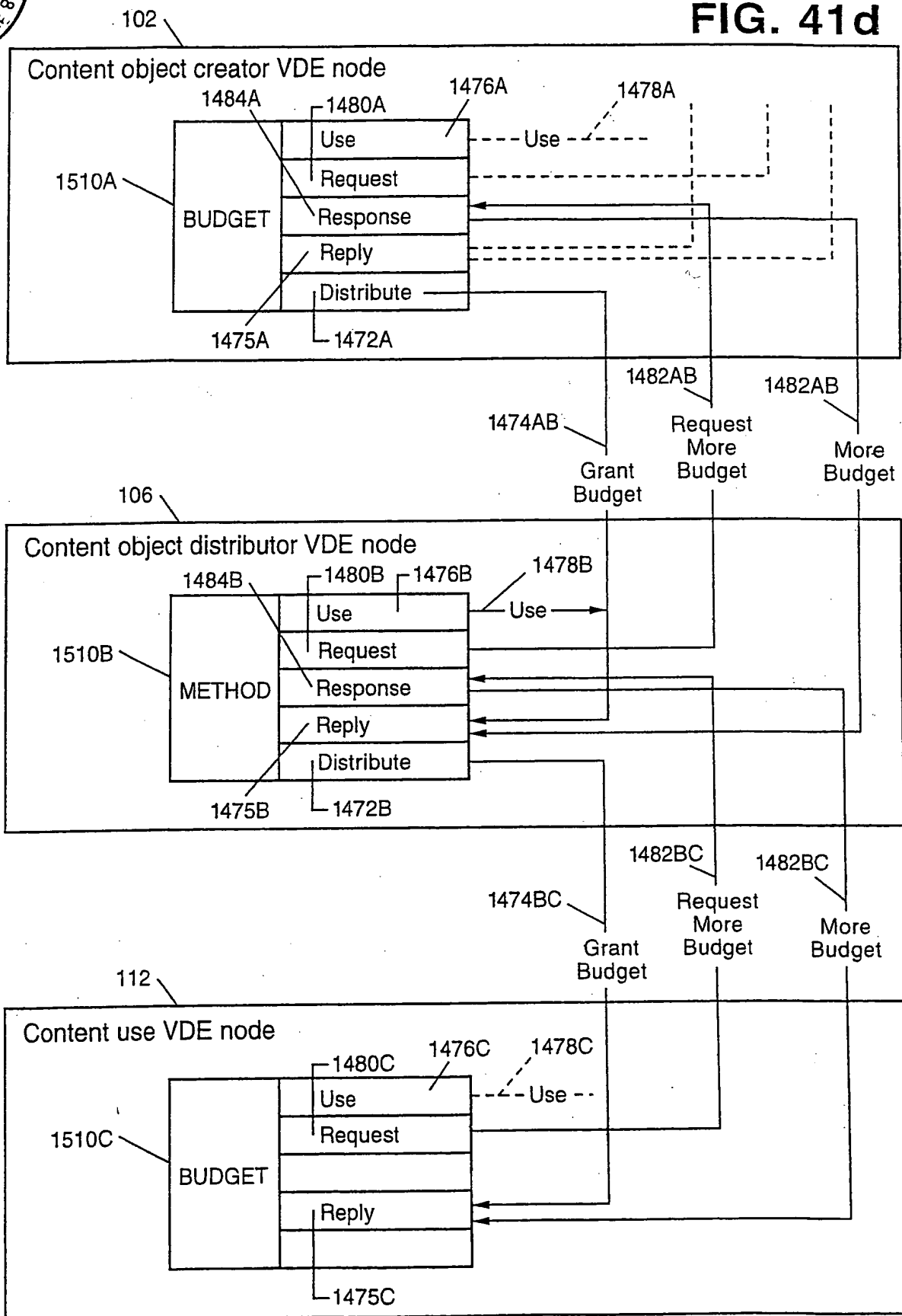




FIG. 41d



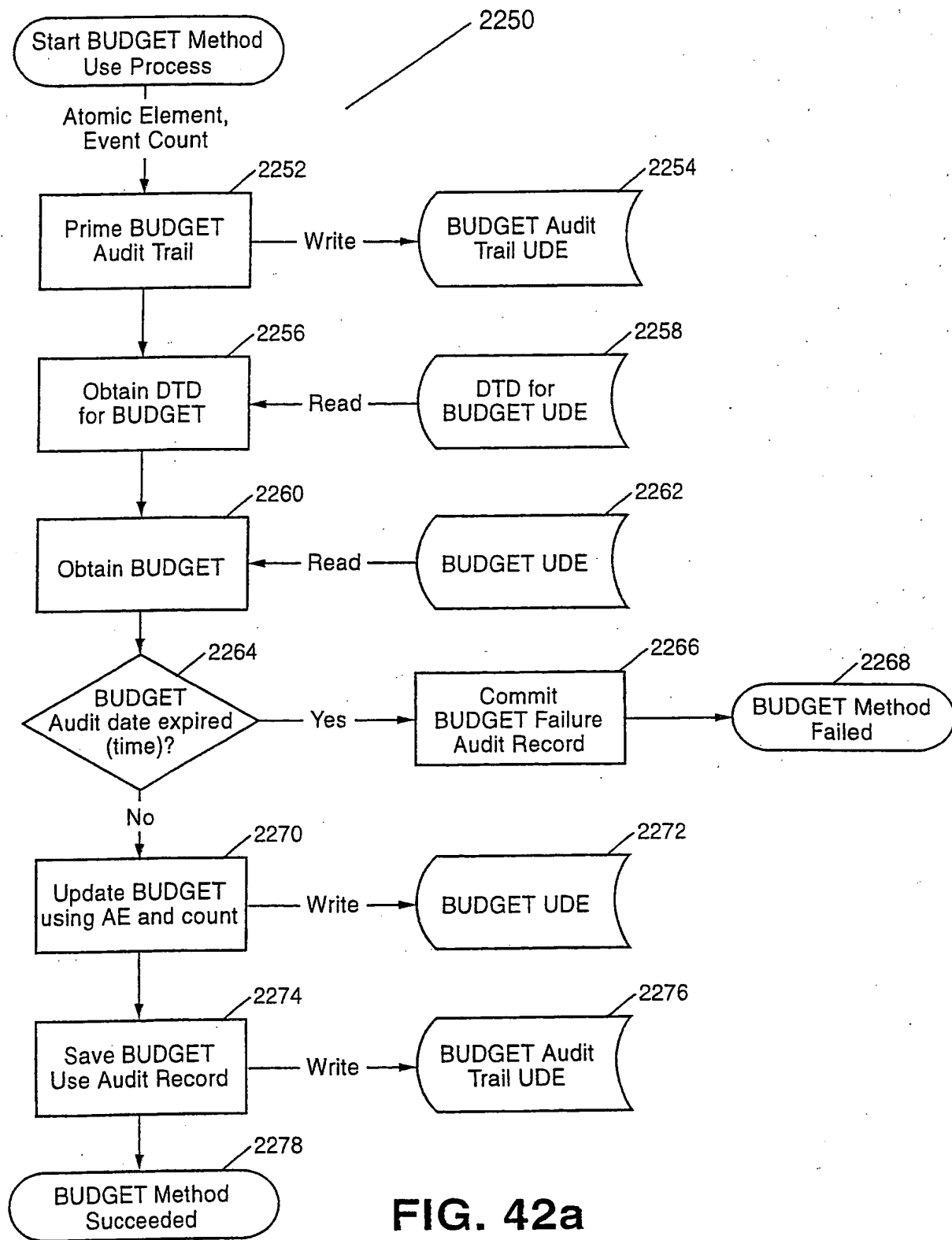


FIG. 42a

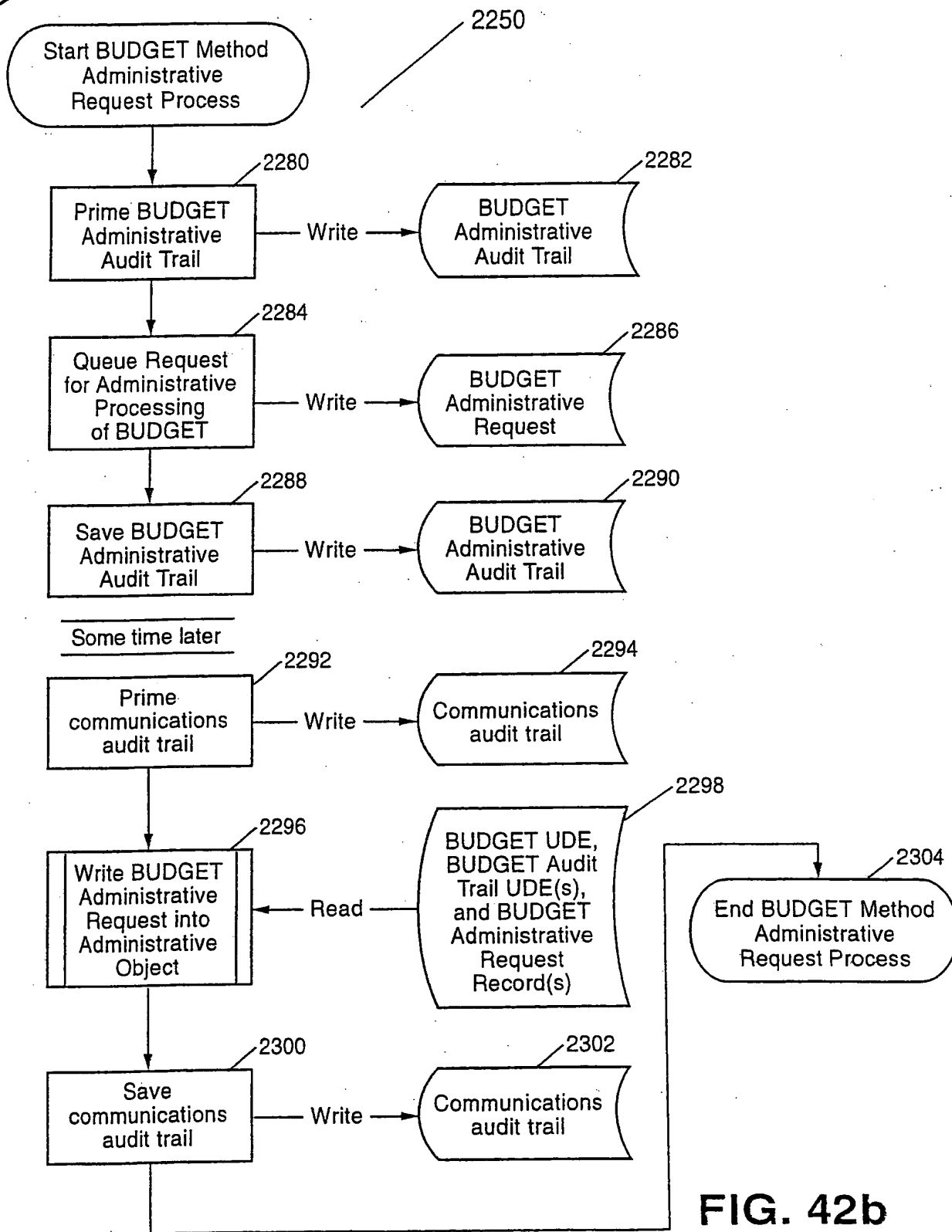


FIG. 42b



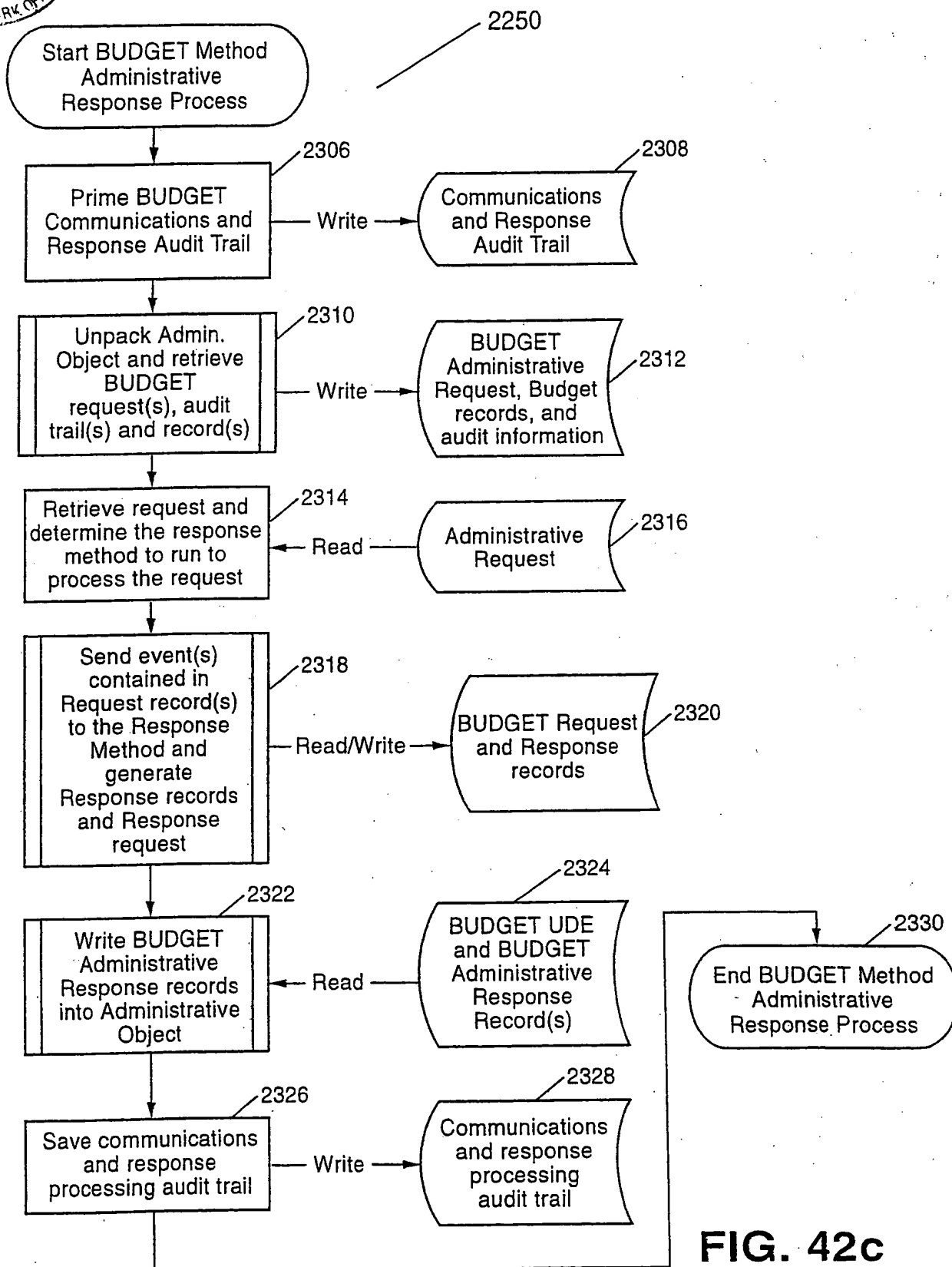


FIG. 42c

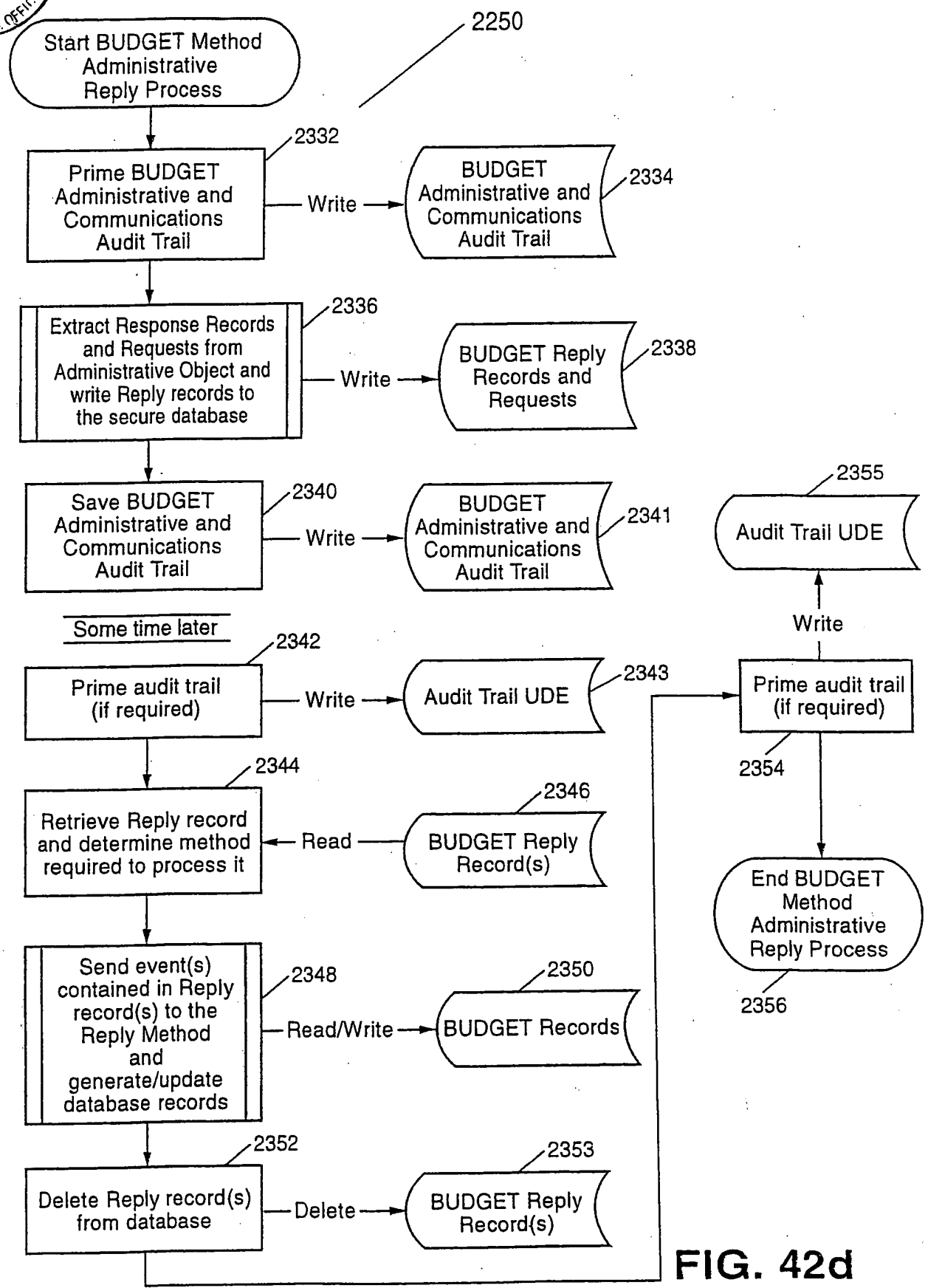


FIG. 42d



FIG. 43a

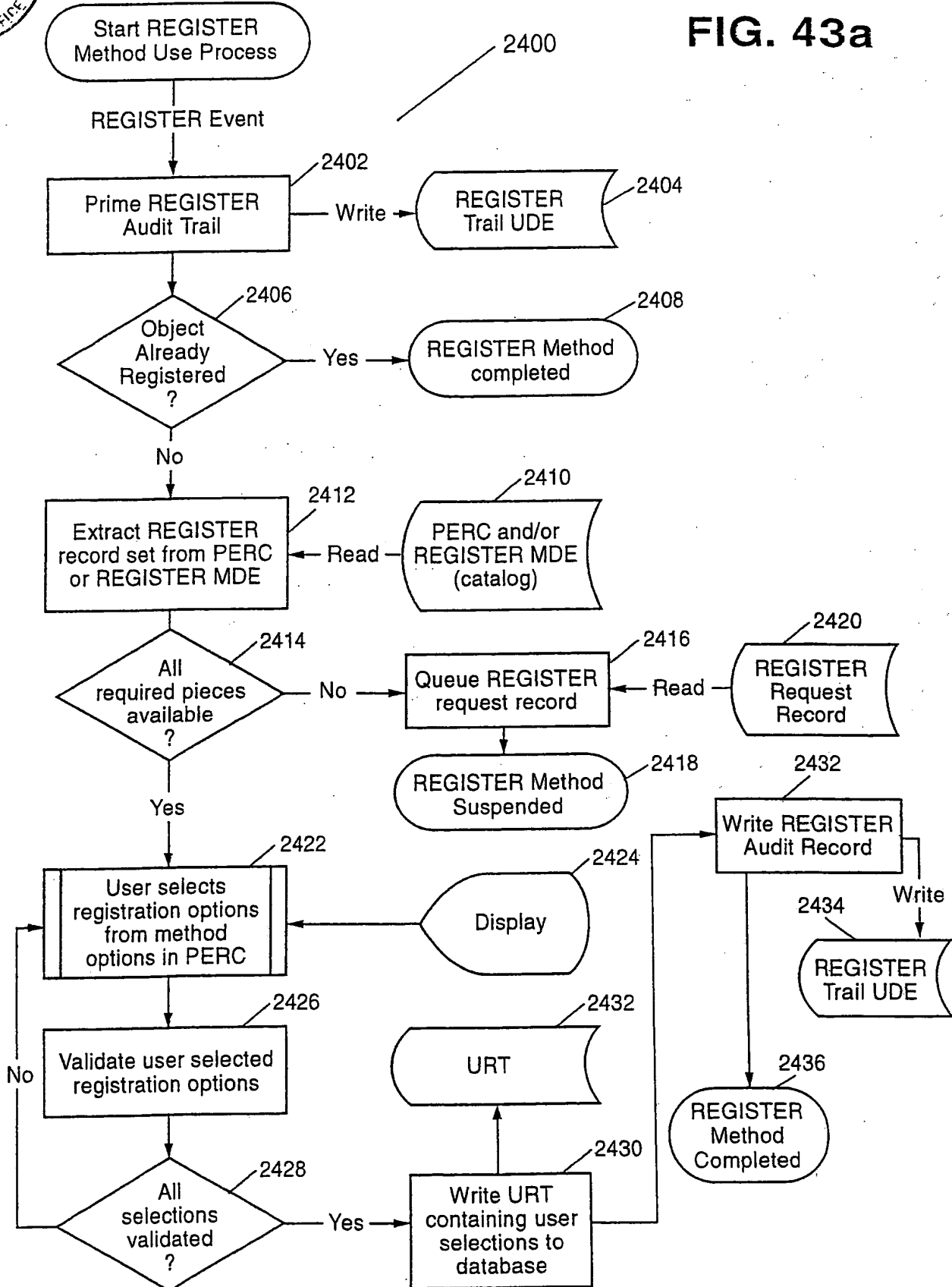




FIG. 43b

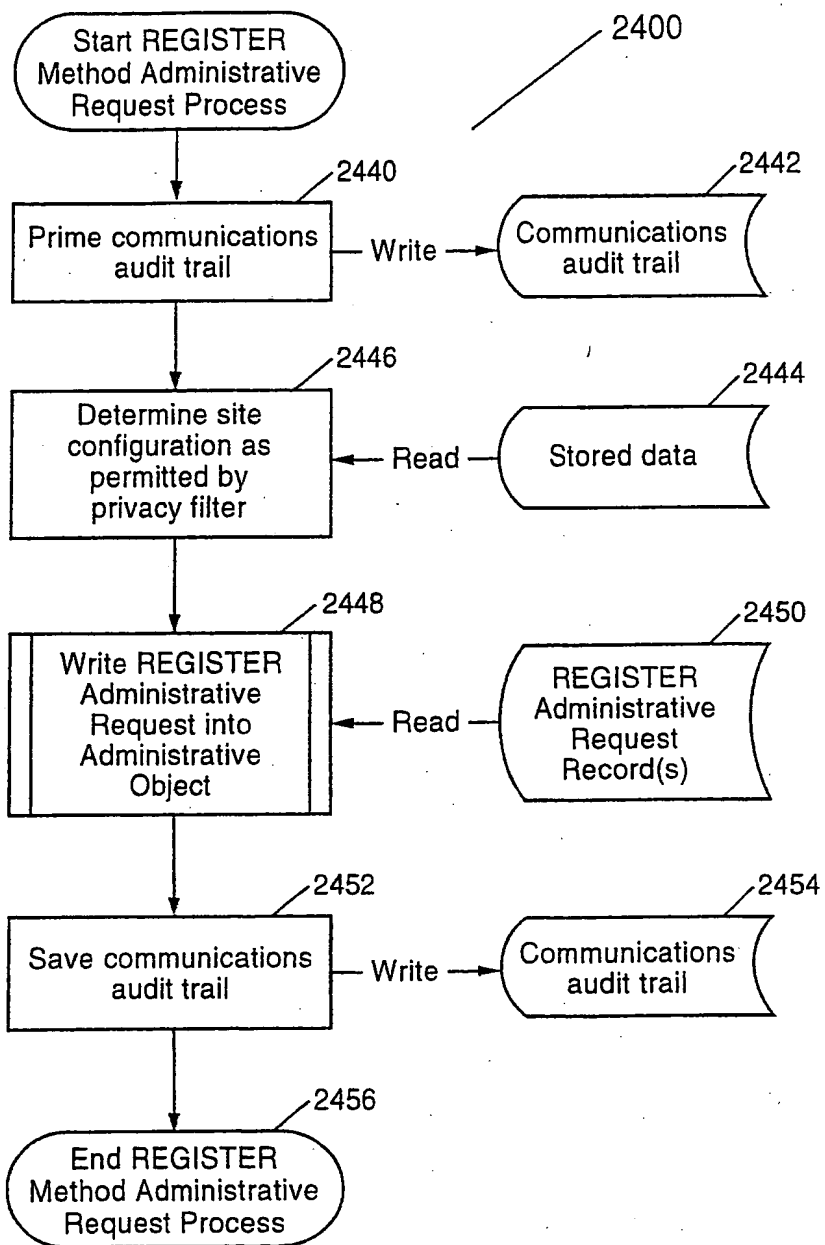




FIG. 43c

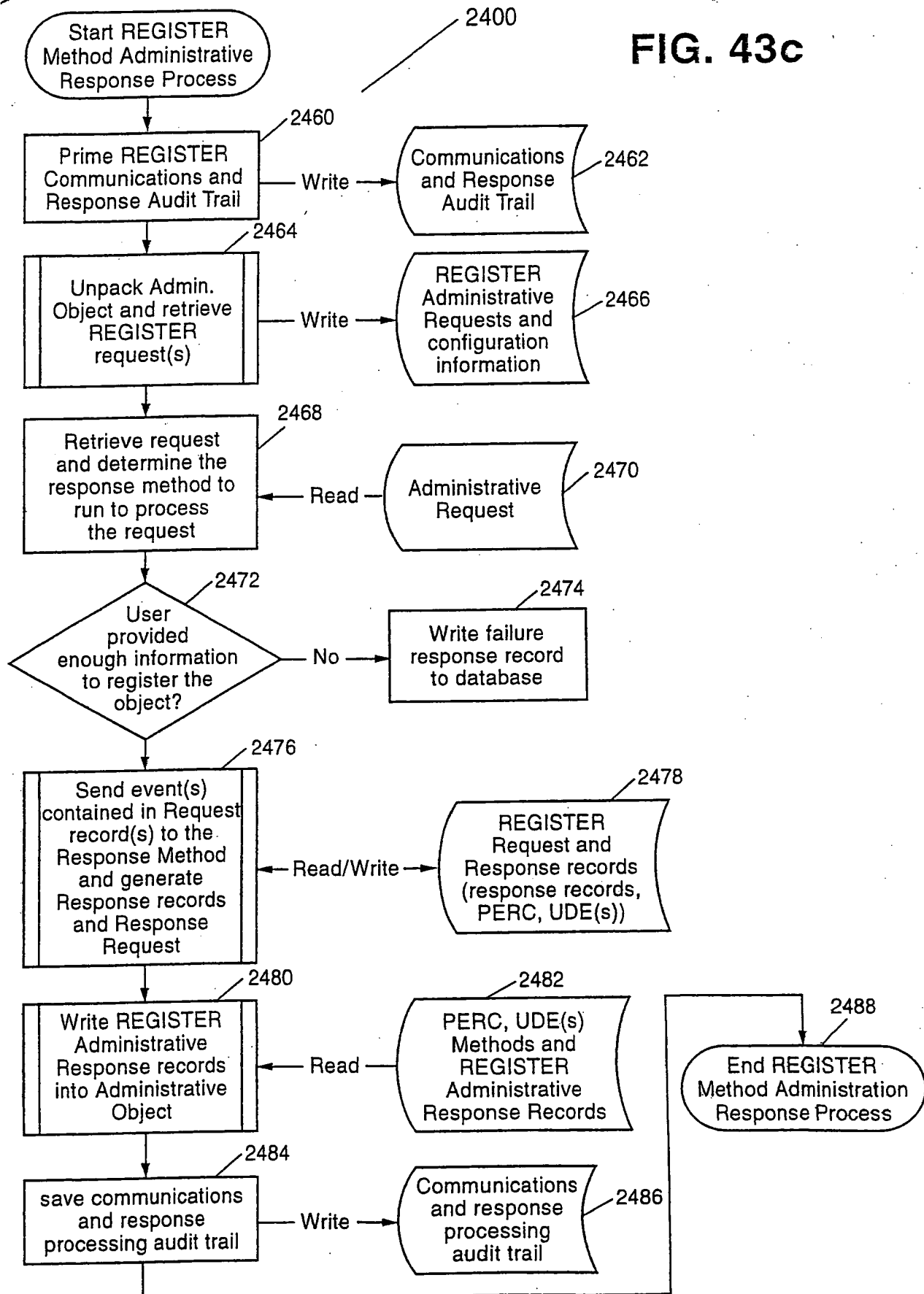




FIG. 43d

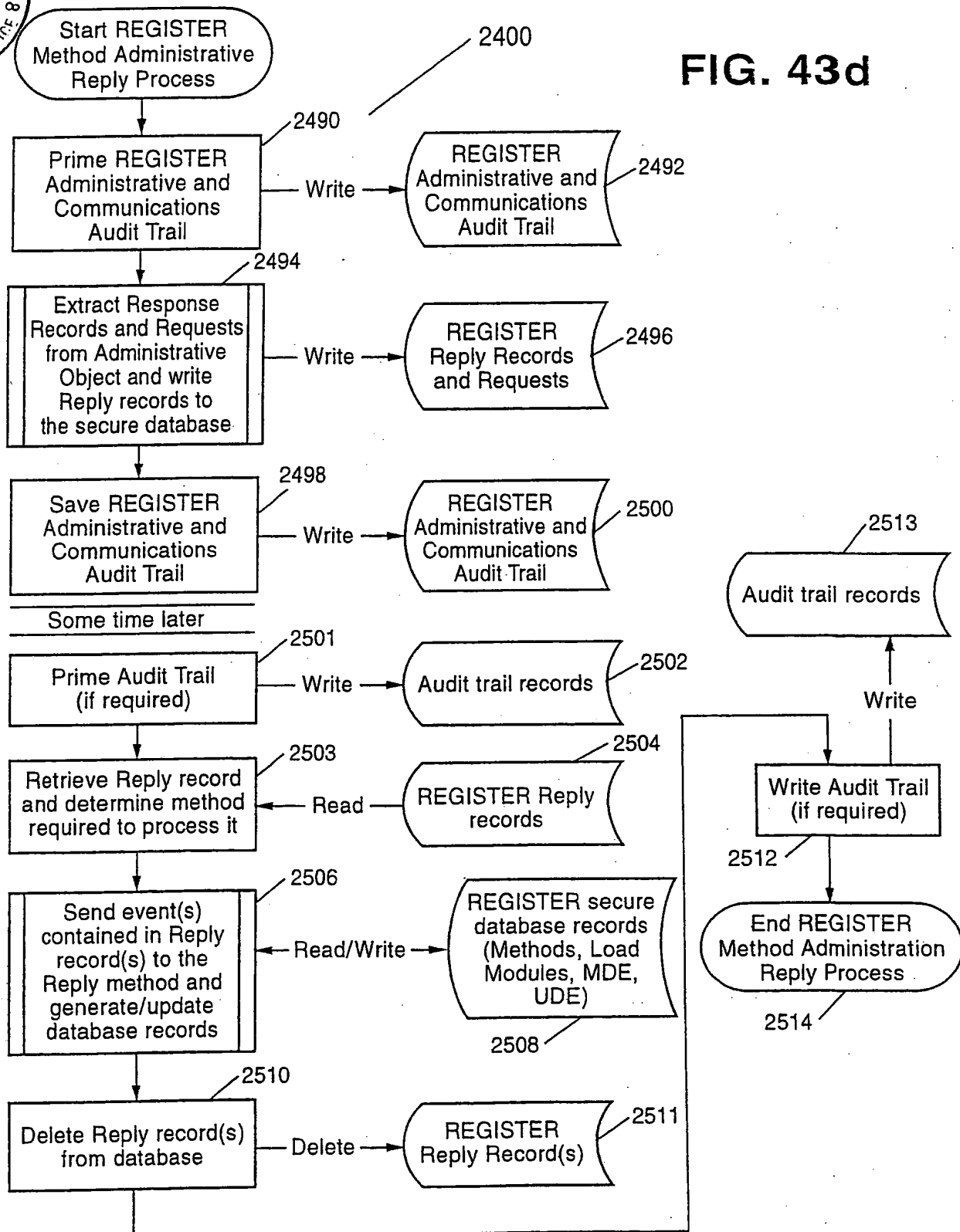




FIG. 44a

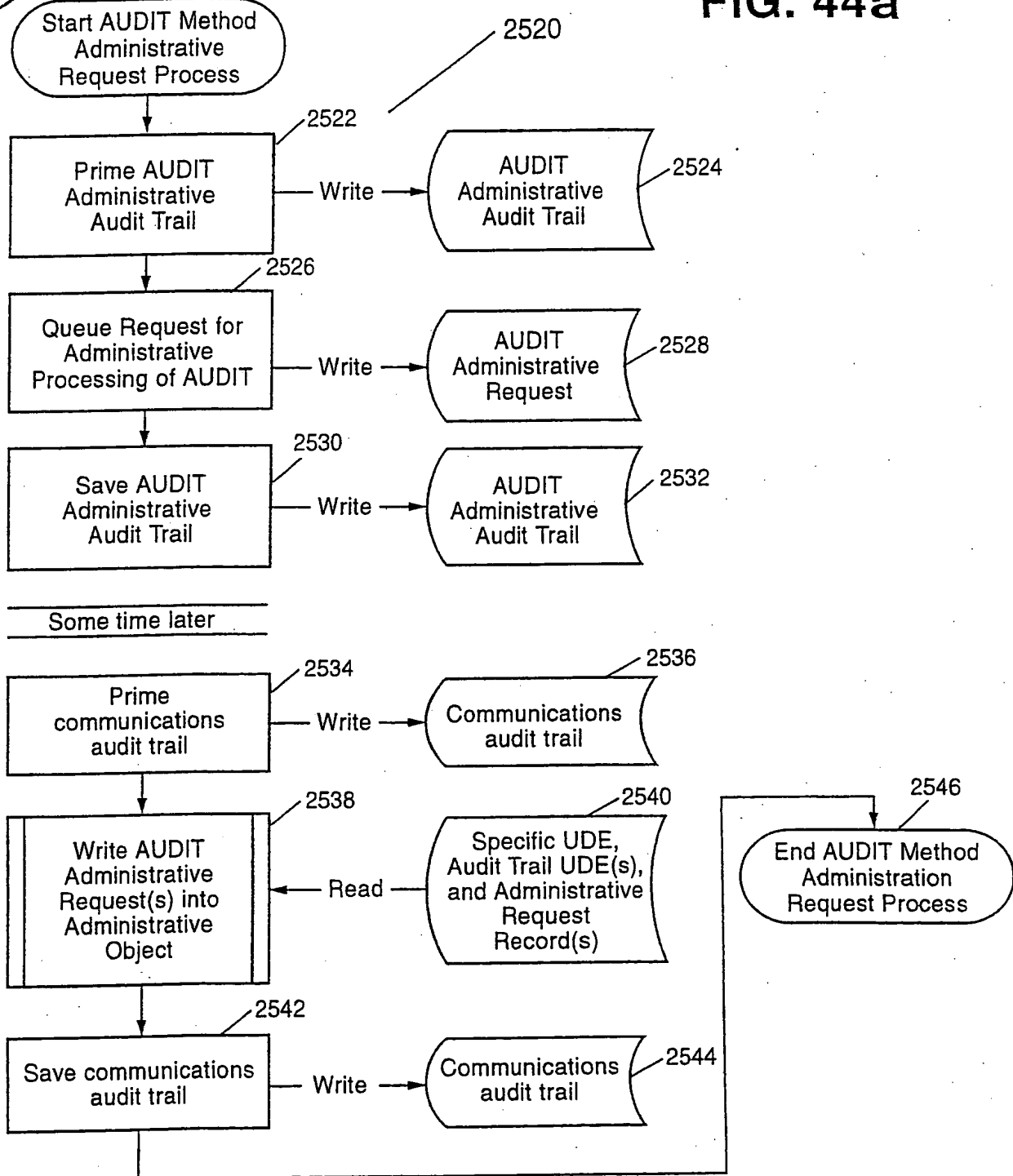




FIG. 44b

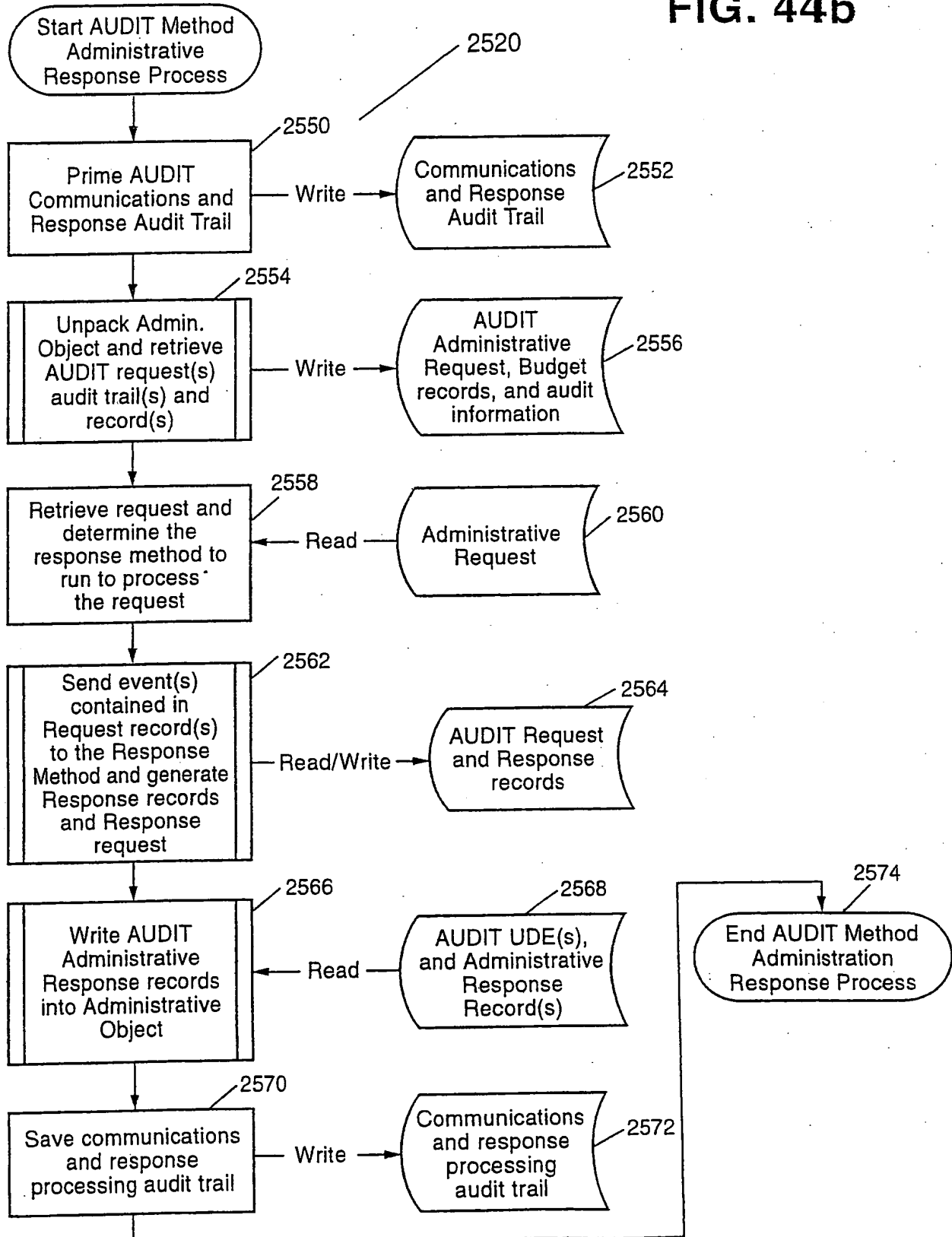






FIG. 44c

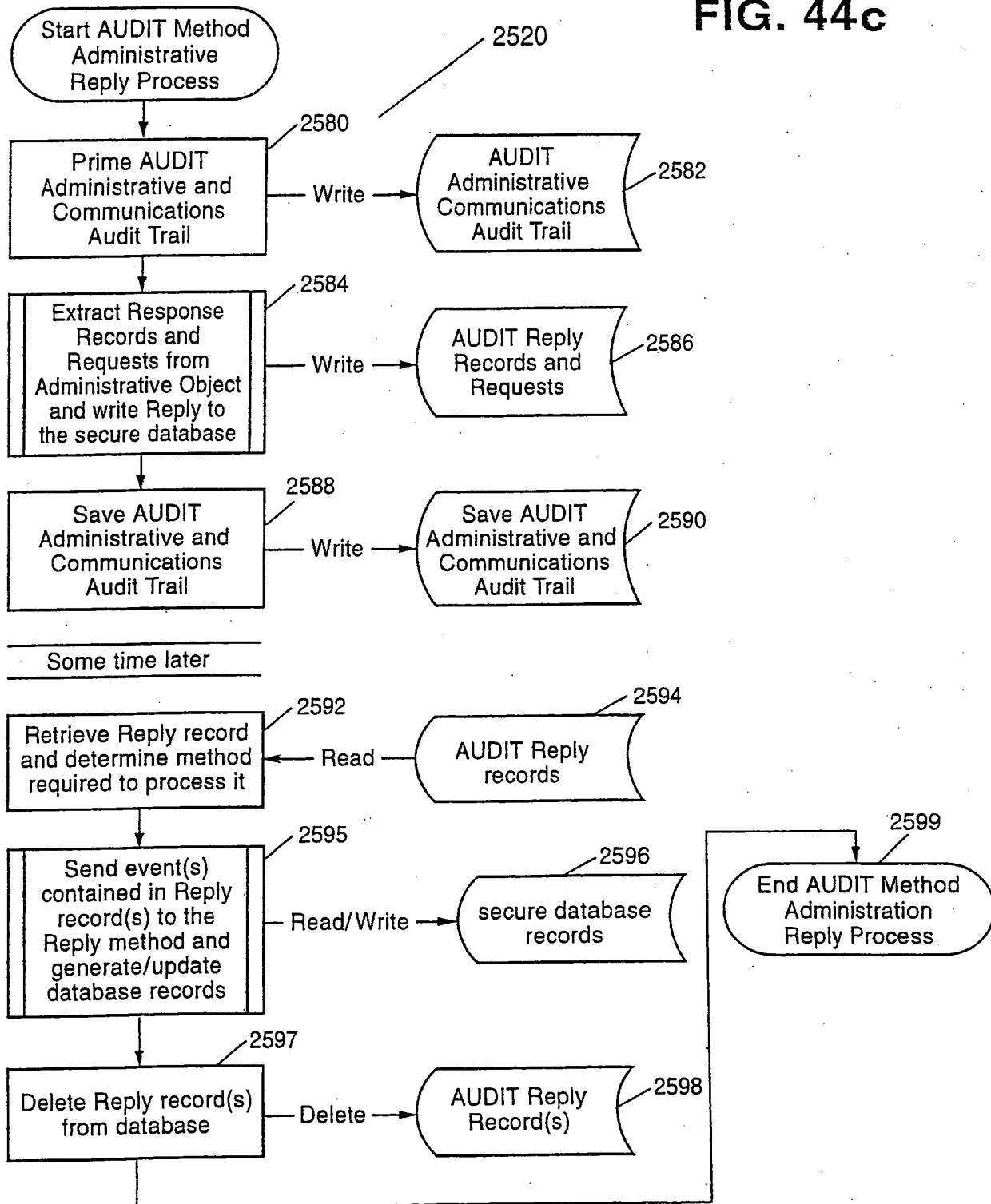




FIG. 45

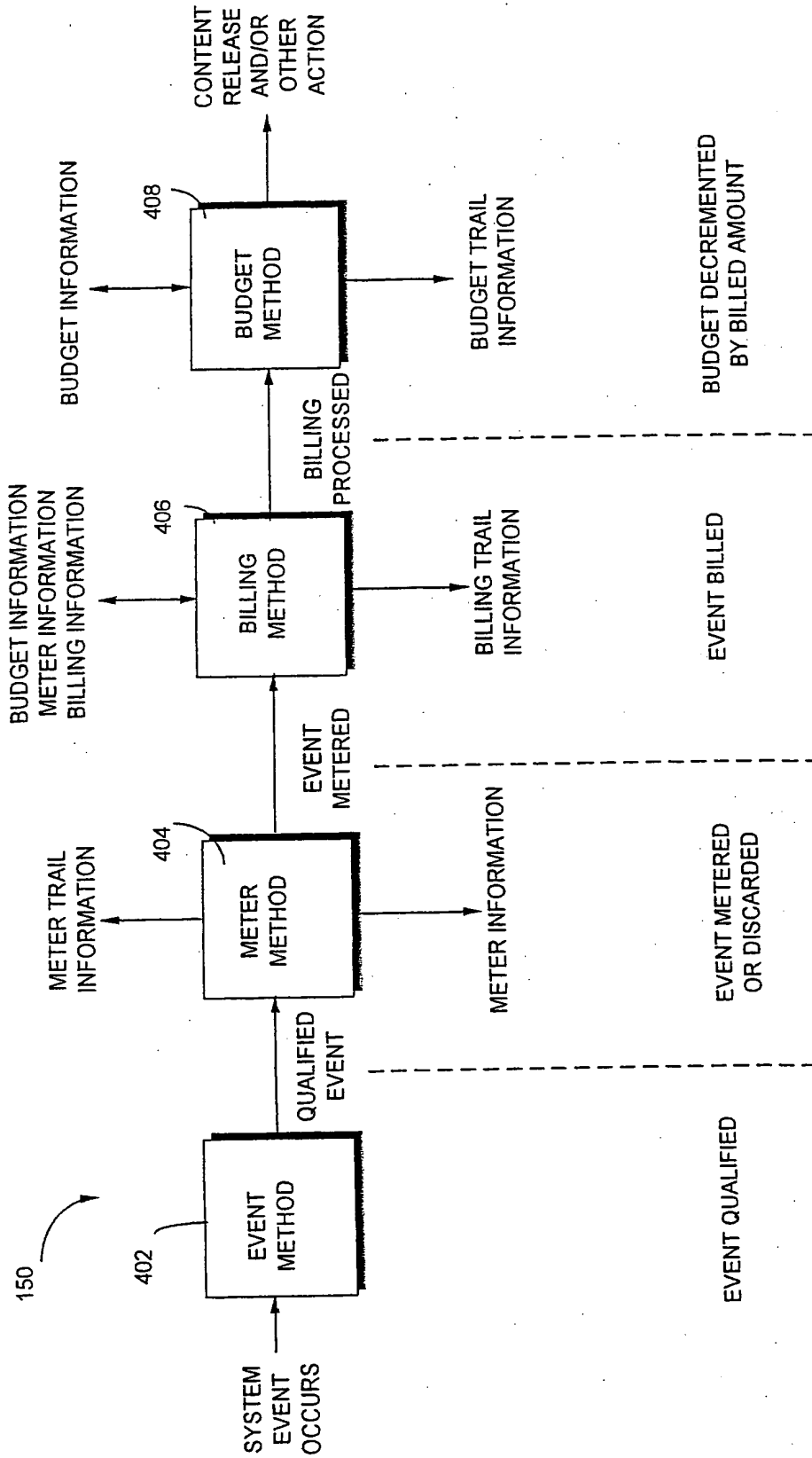




FIG. 46

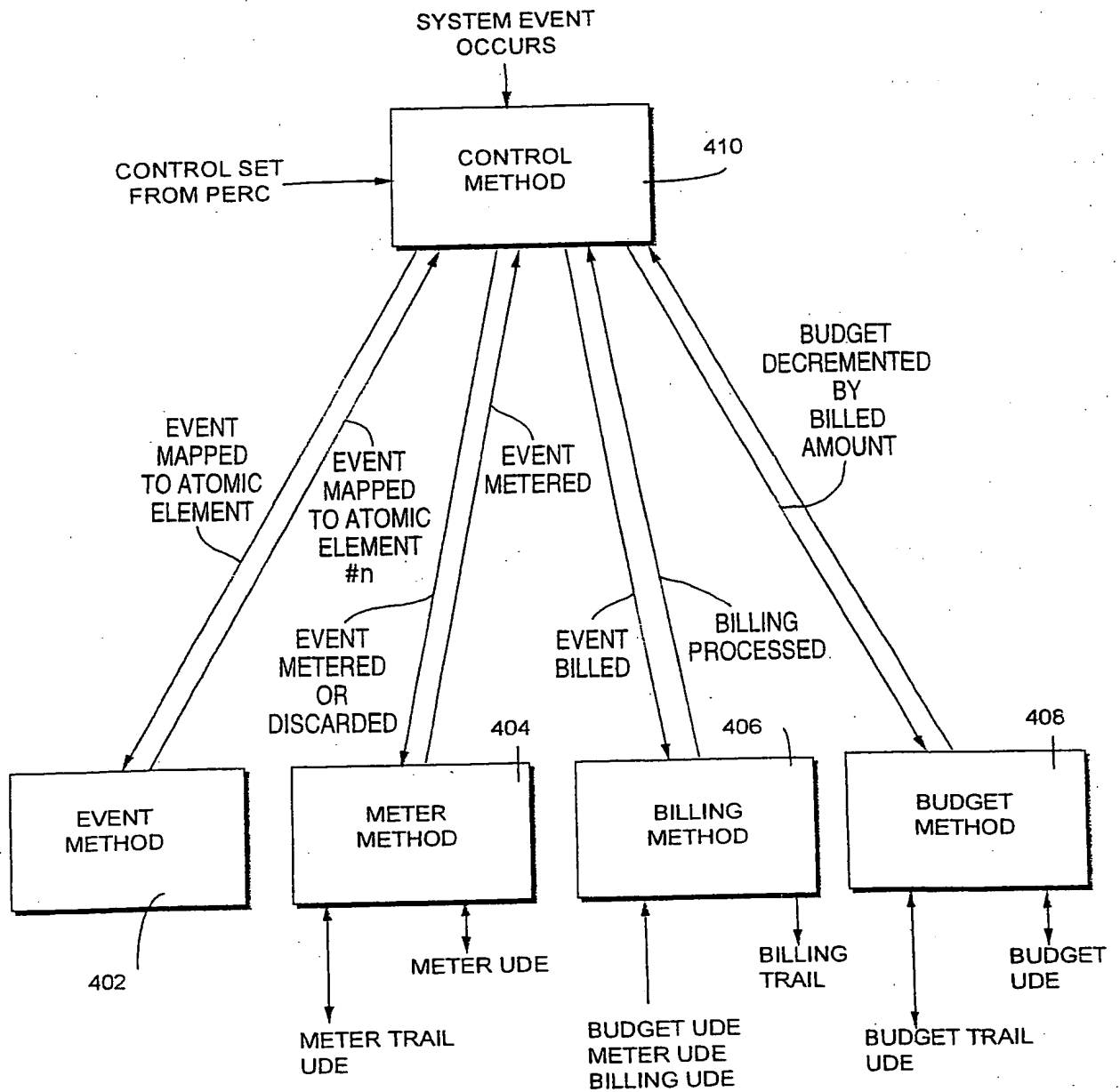
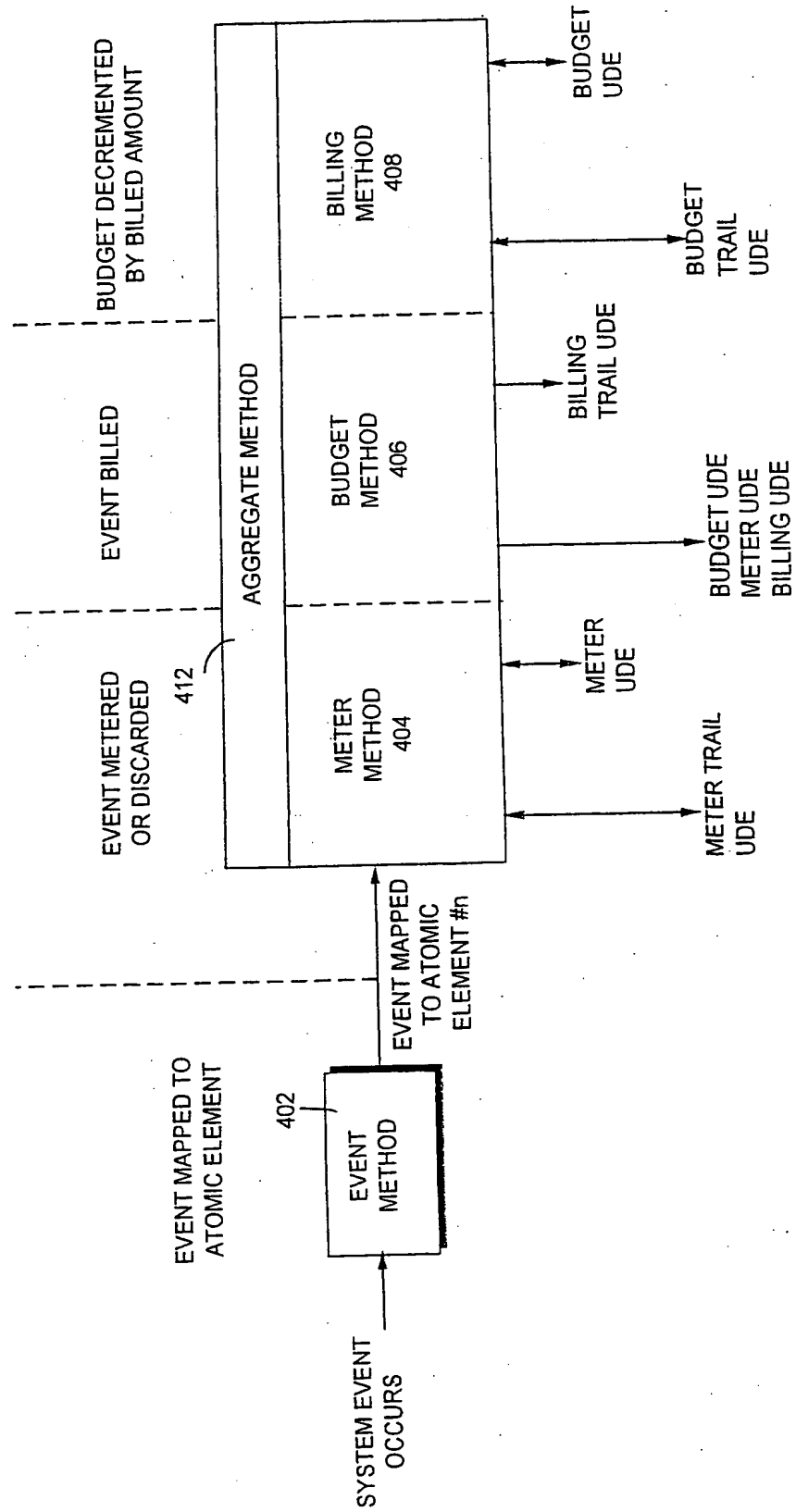
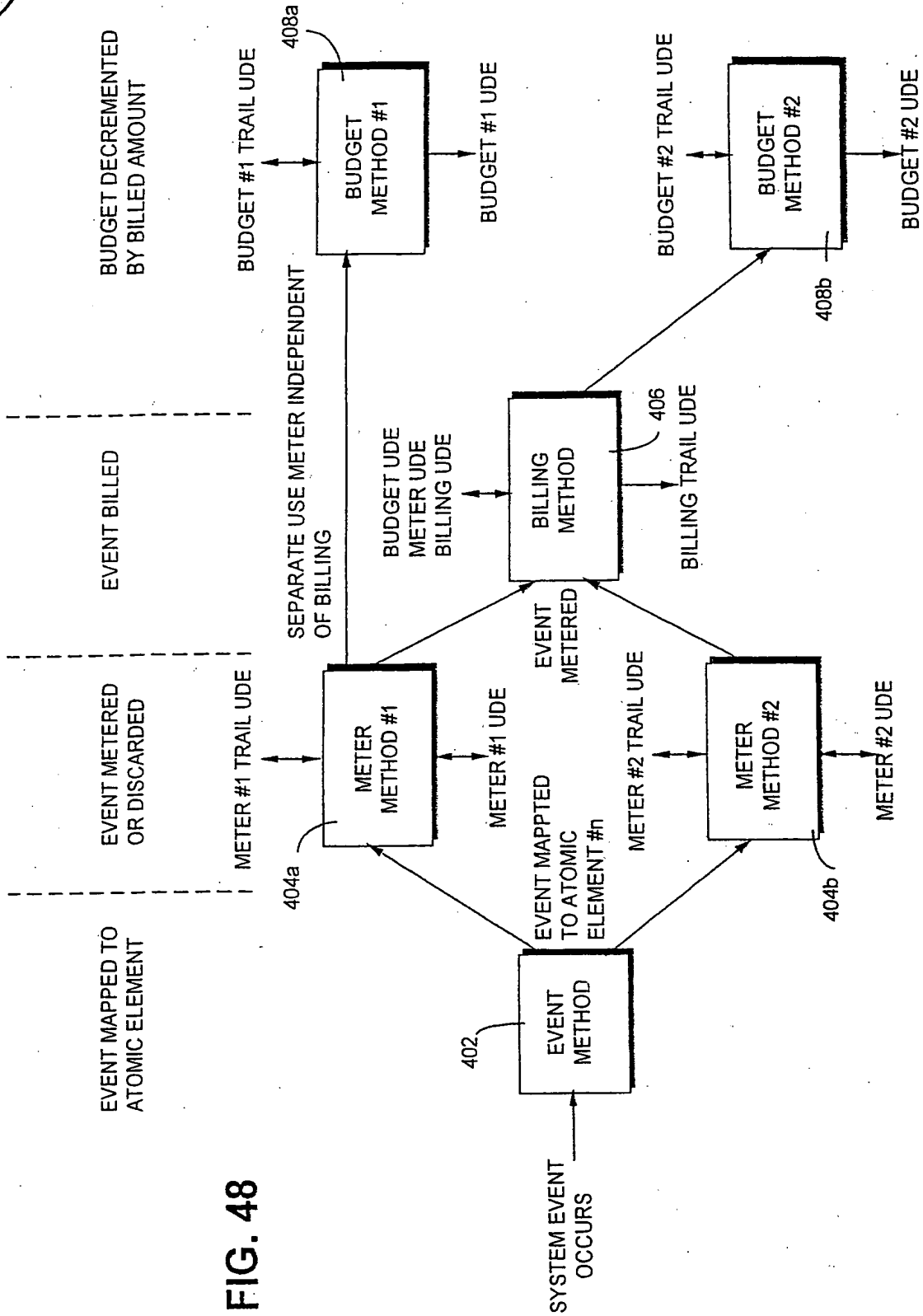




FIG. 47





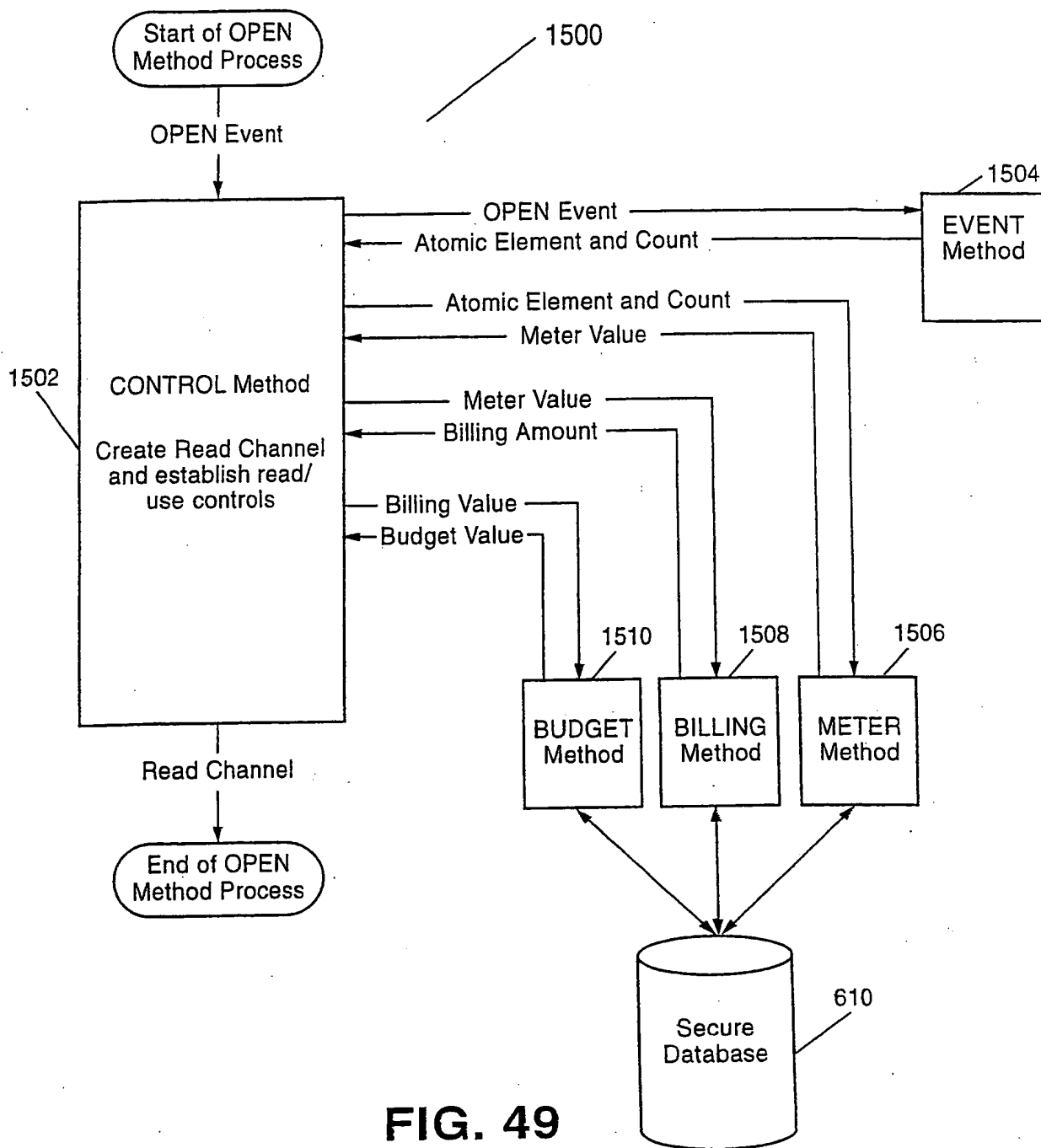


FIG. 49



REPLACEMENT SHEET  
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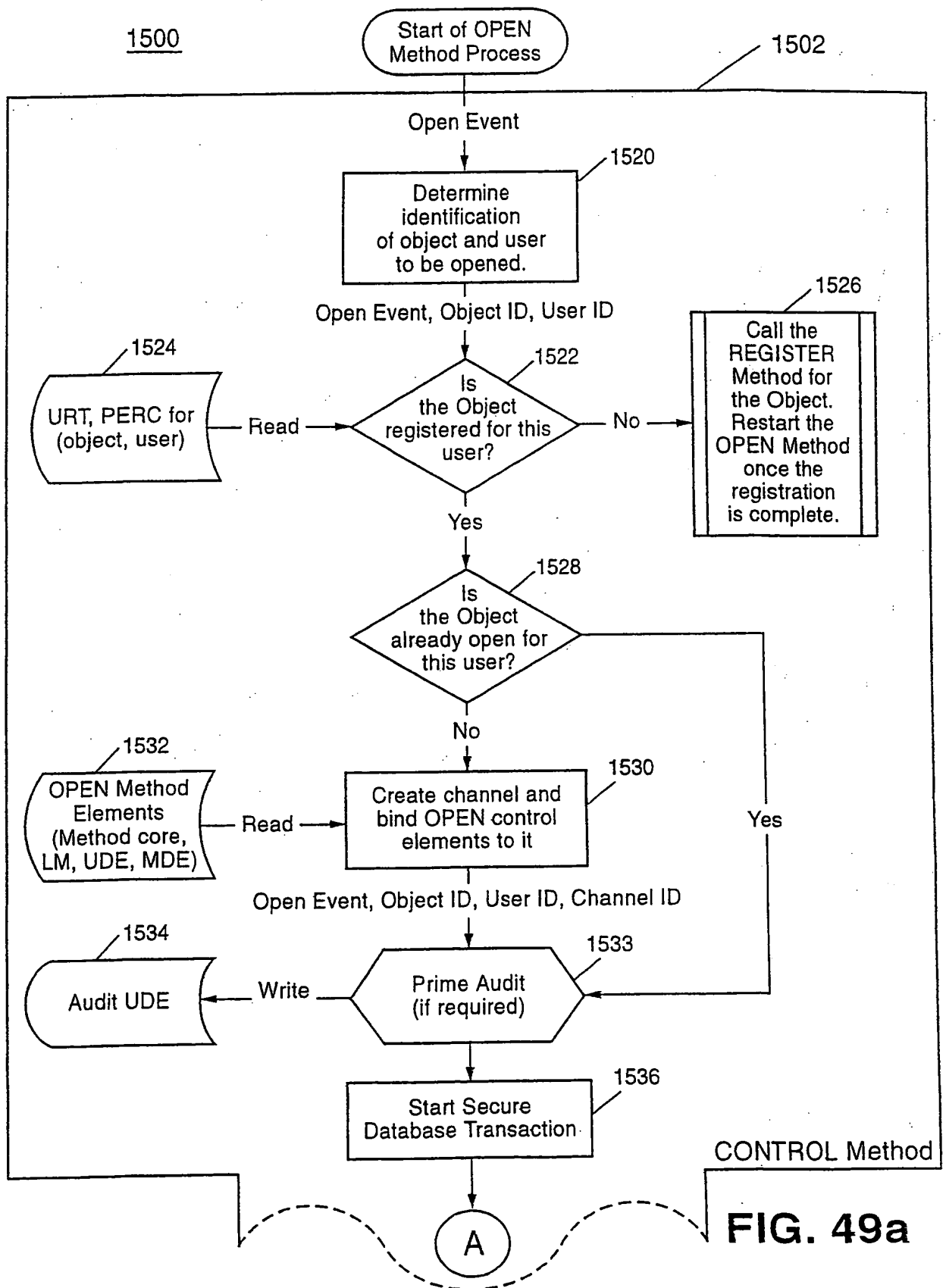
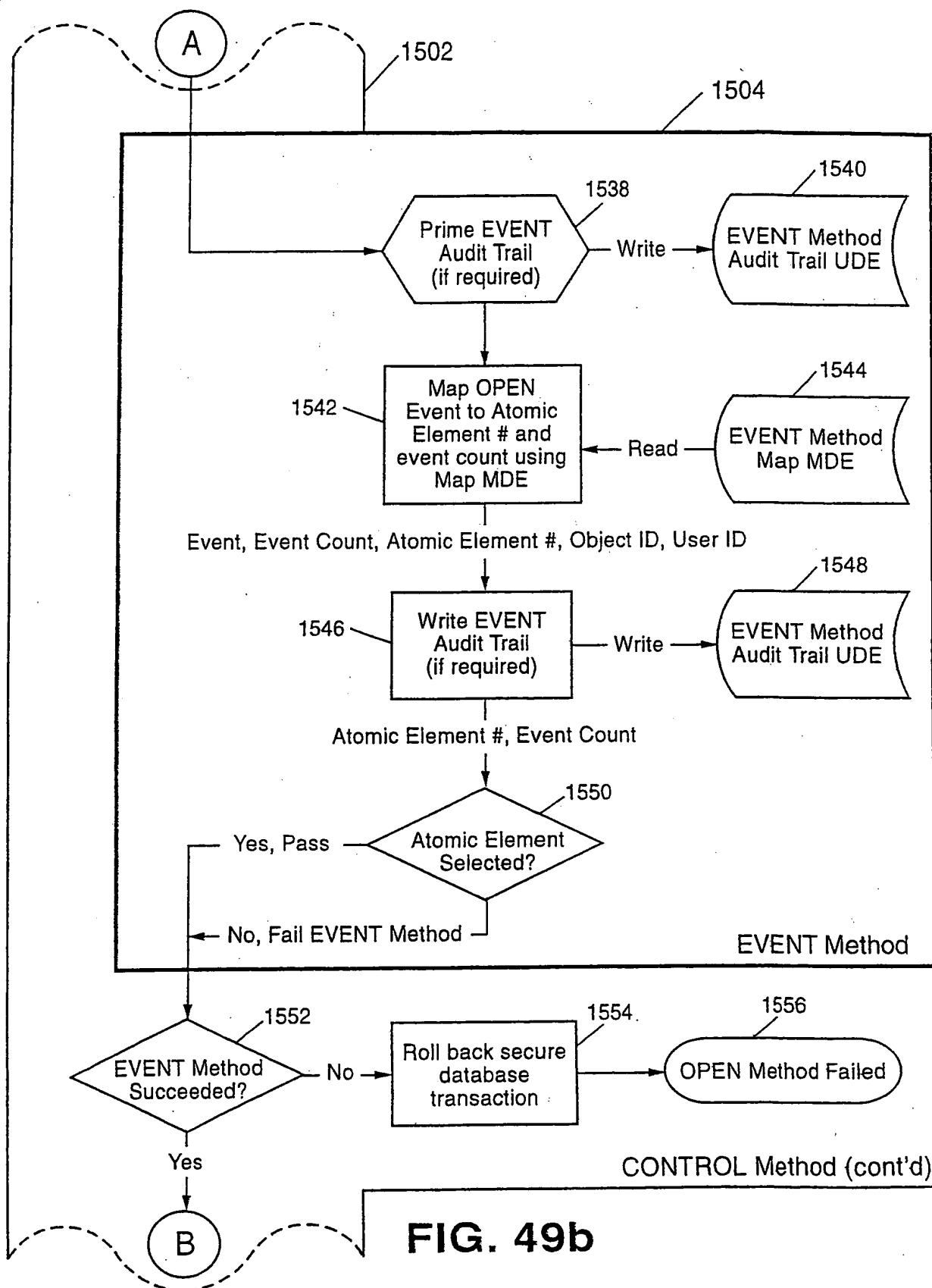
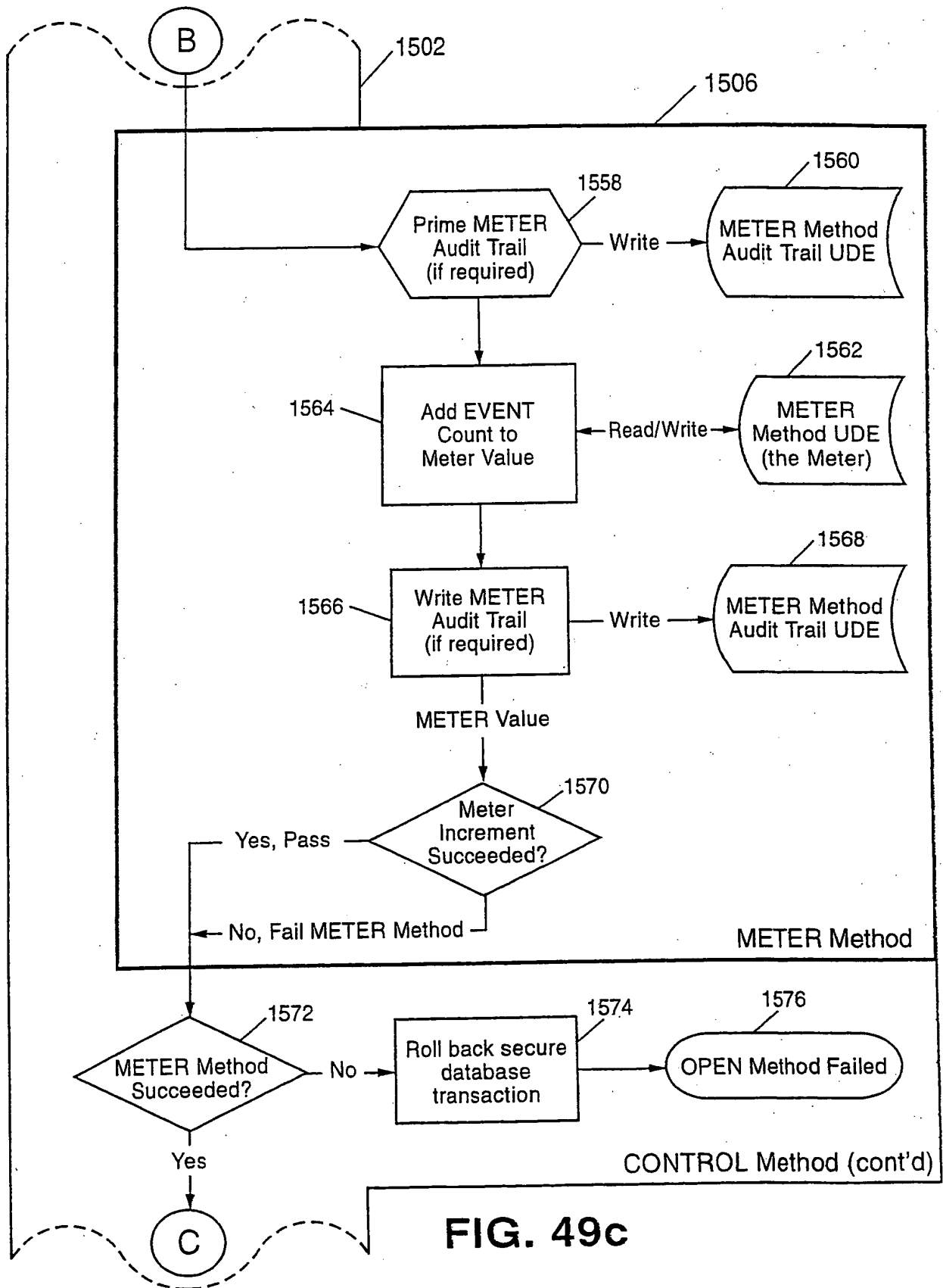
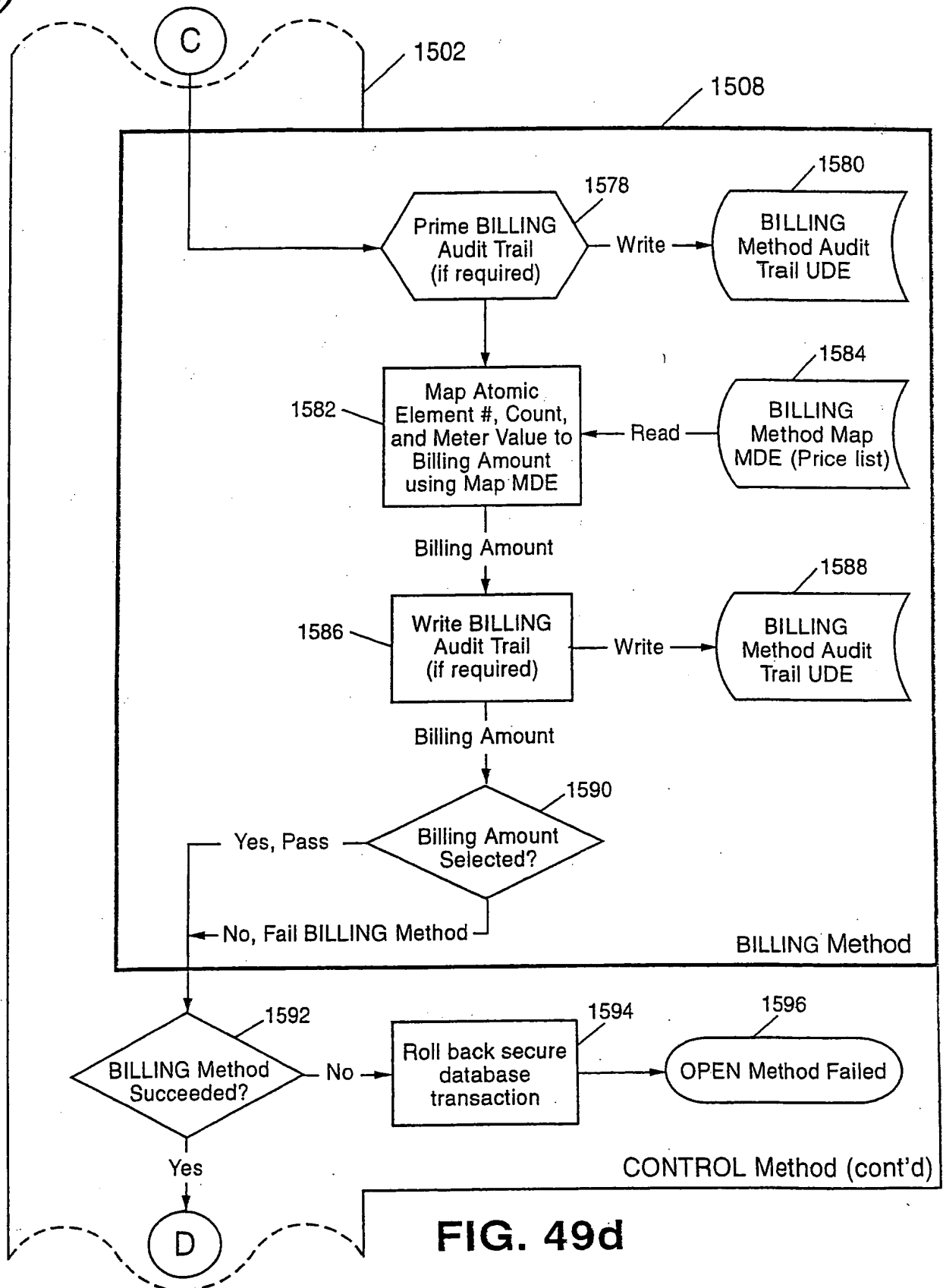


FIG. 49a









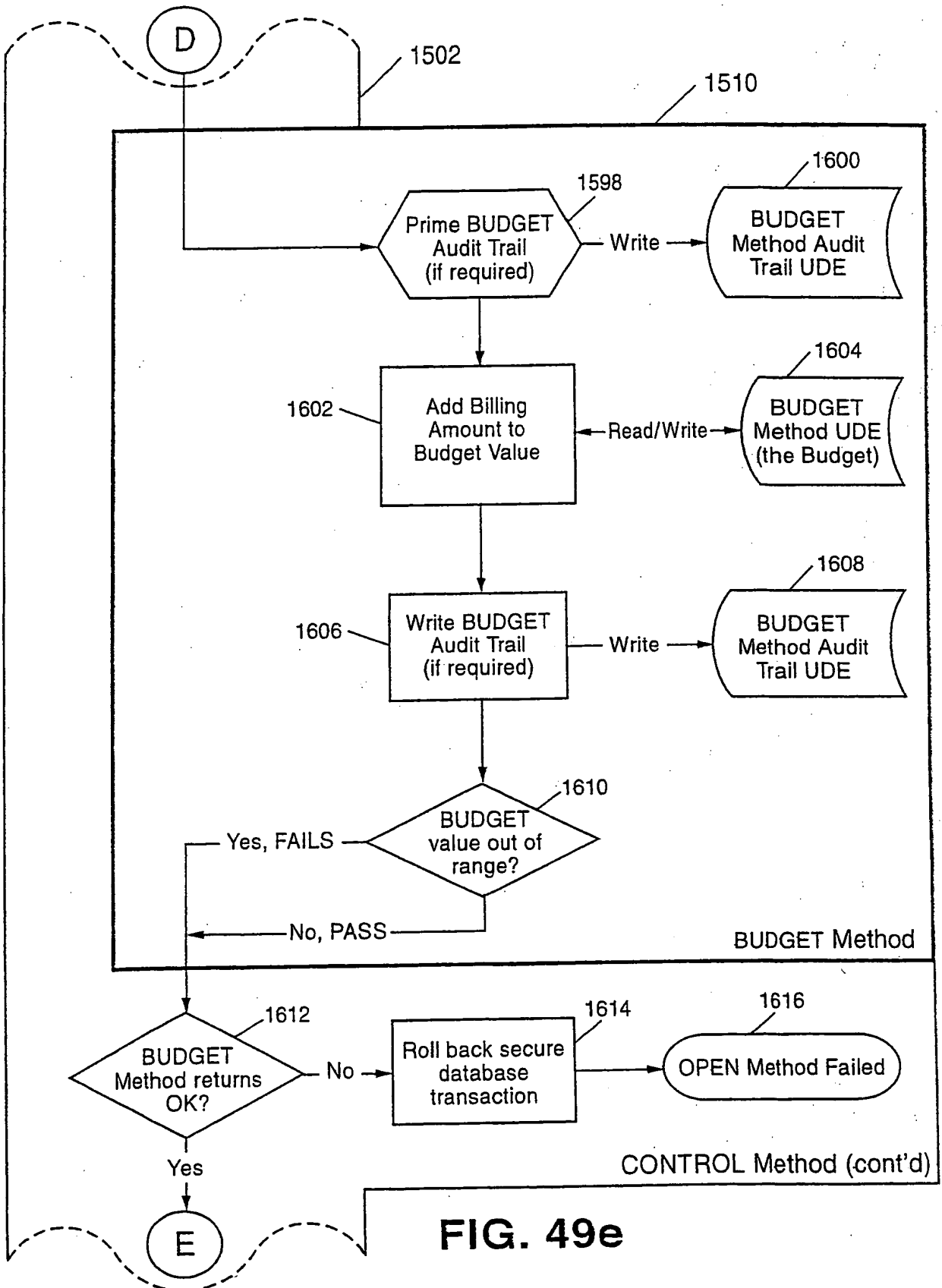
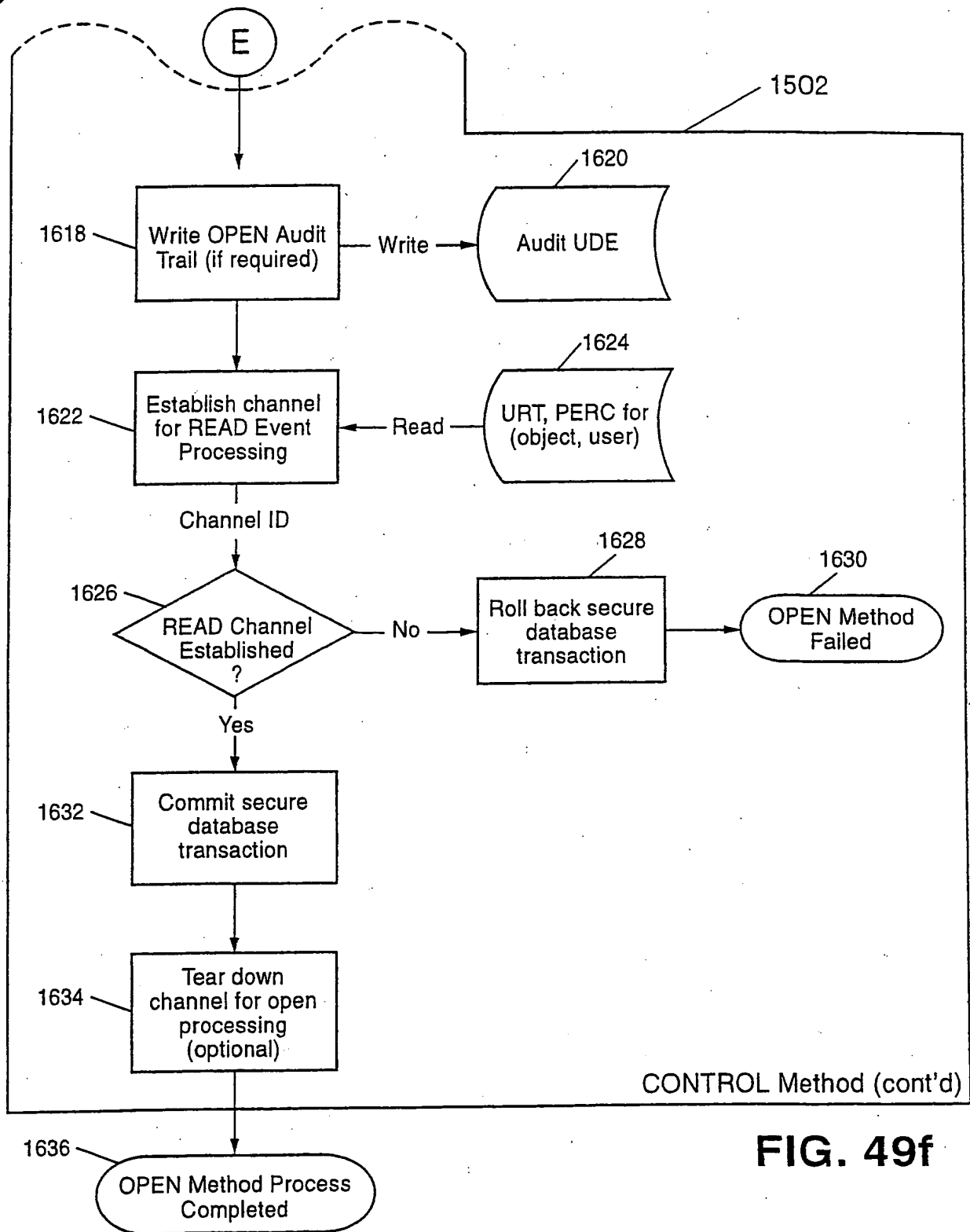


FIG. 49e



**FIG. 49f**

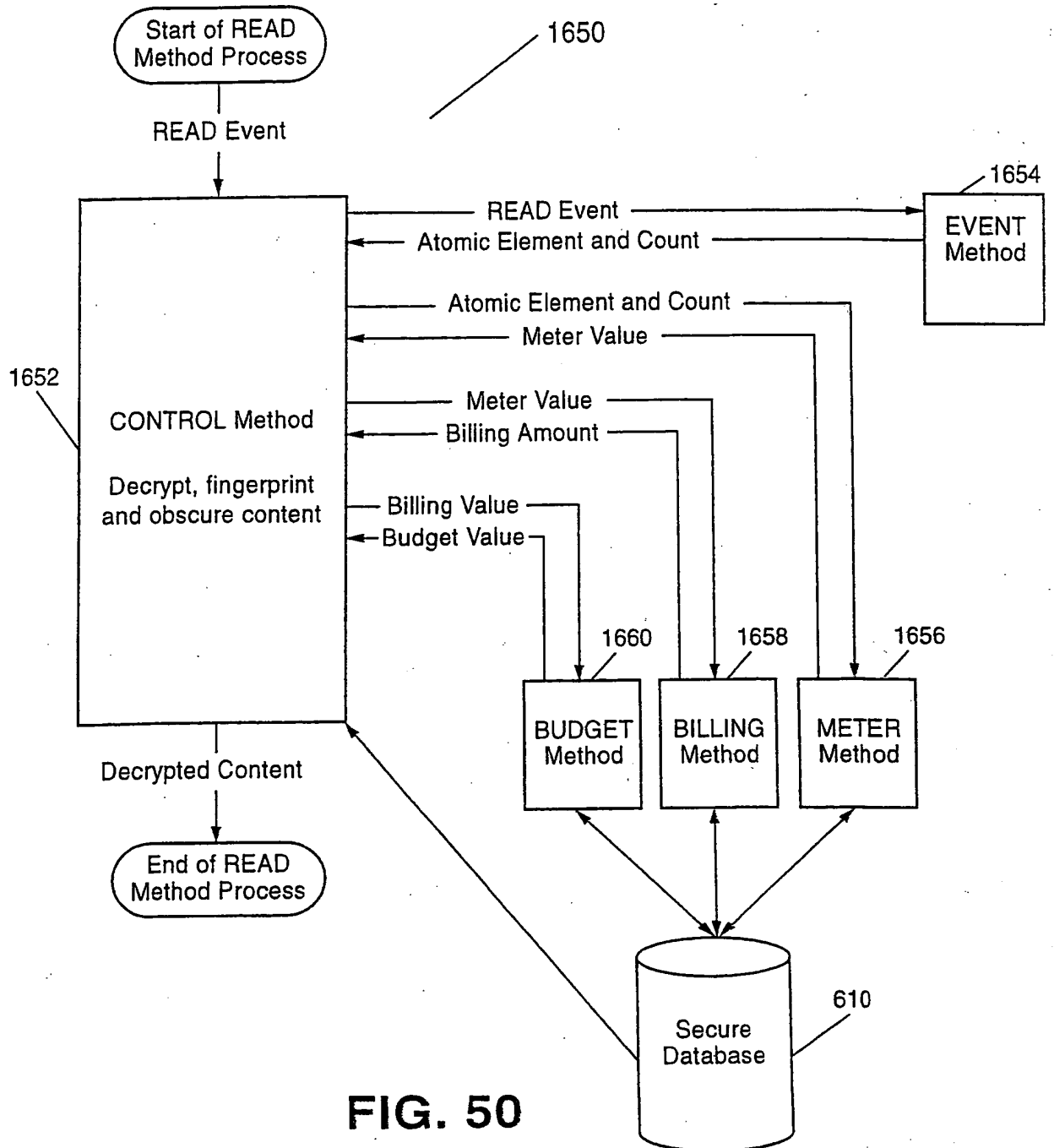
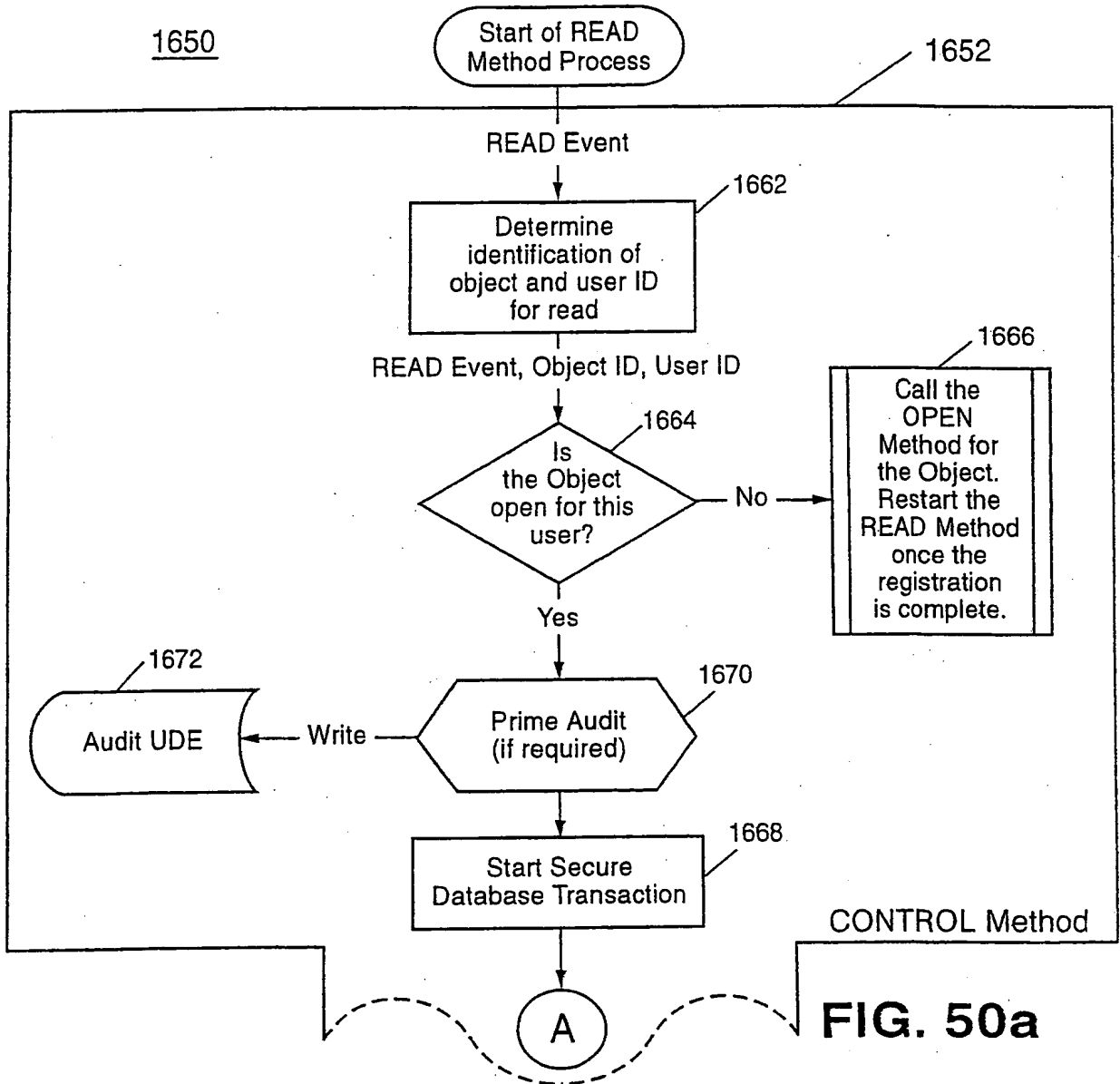
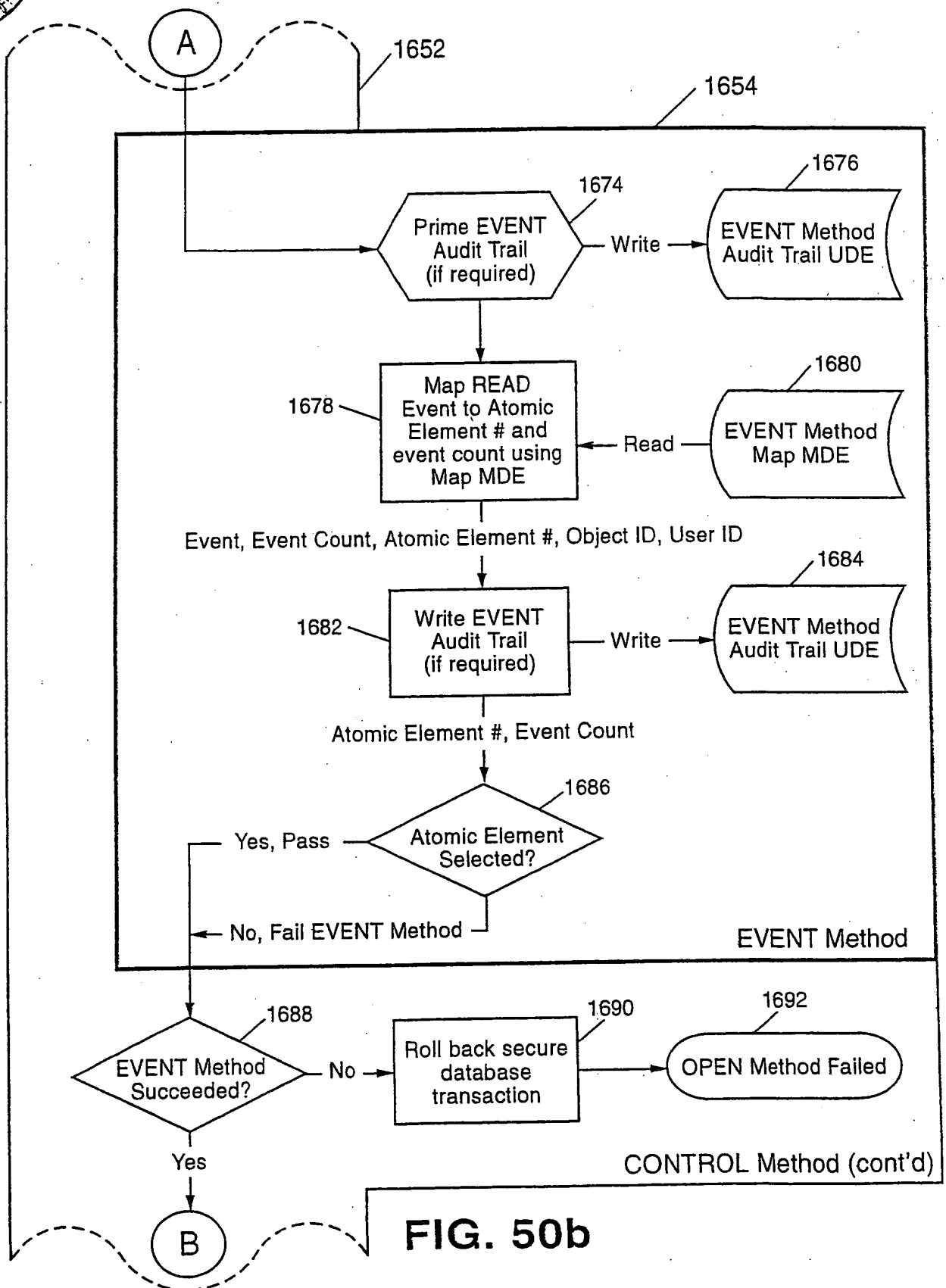
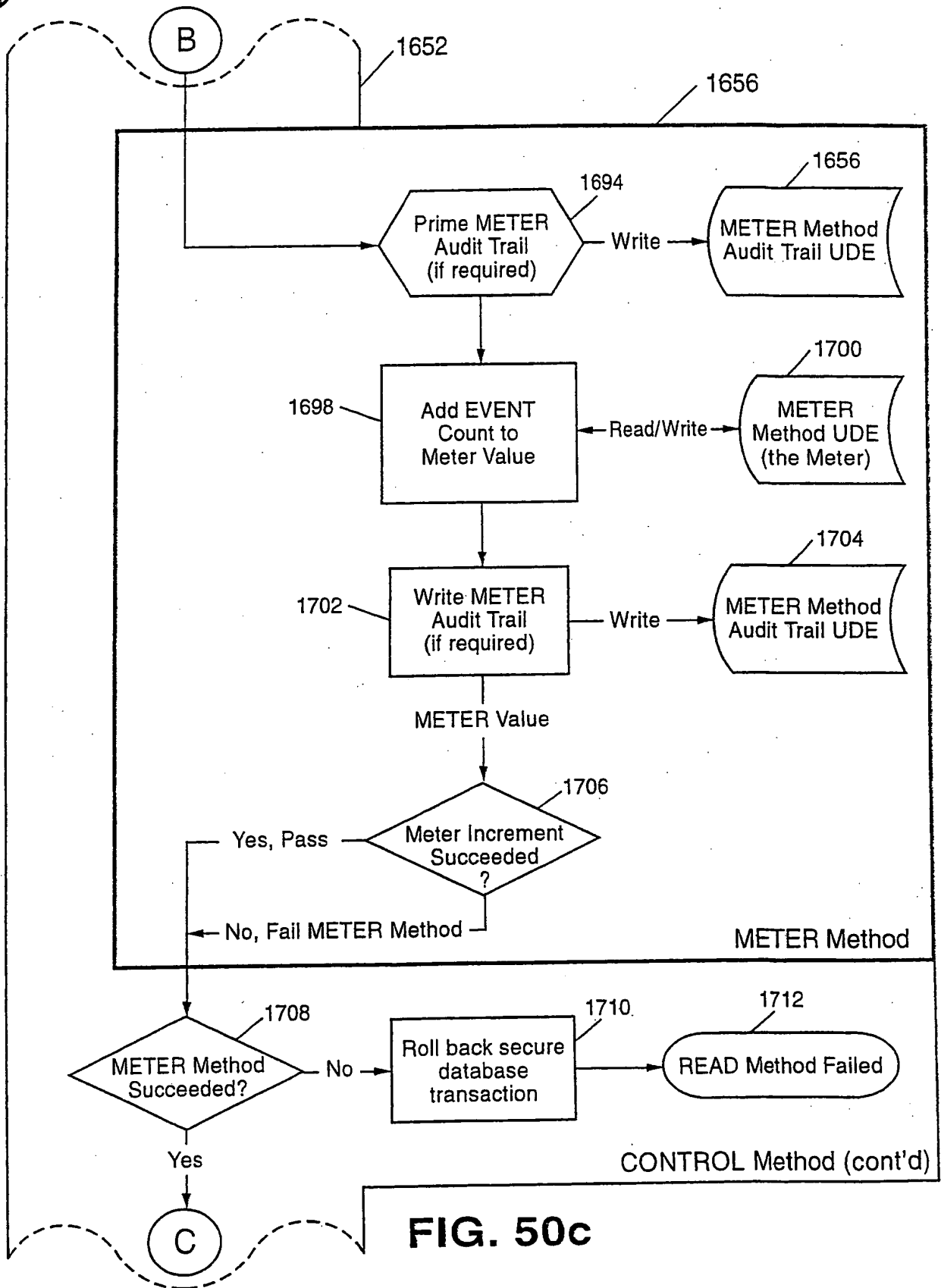


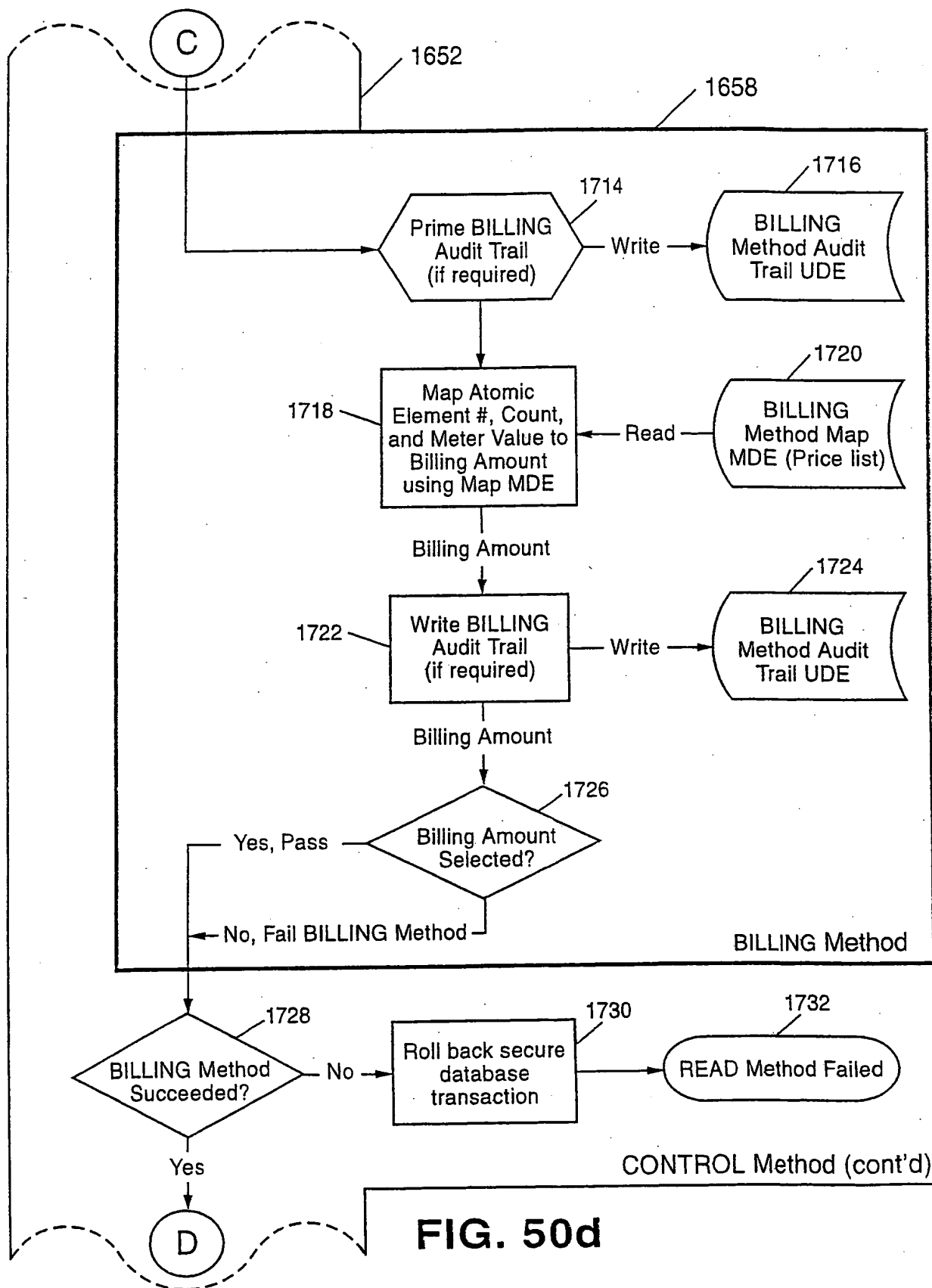
FIG. 50











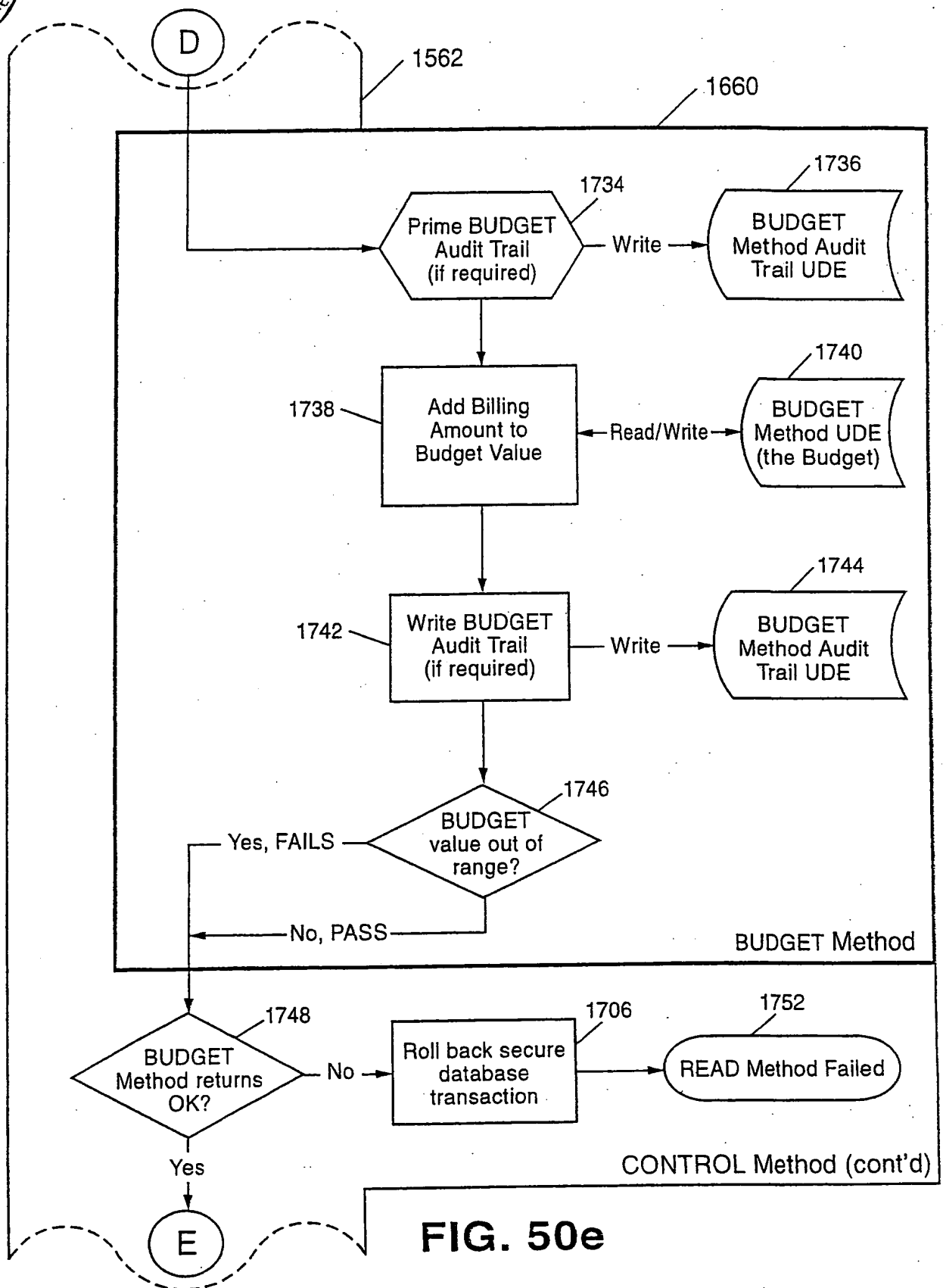
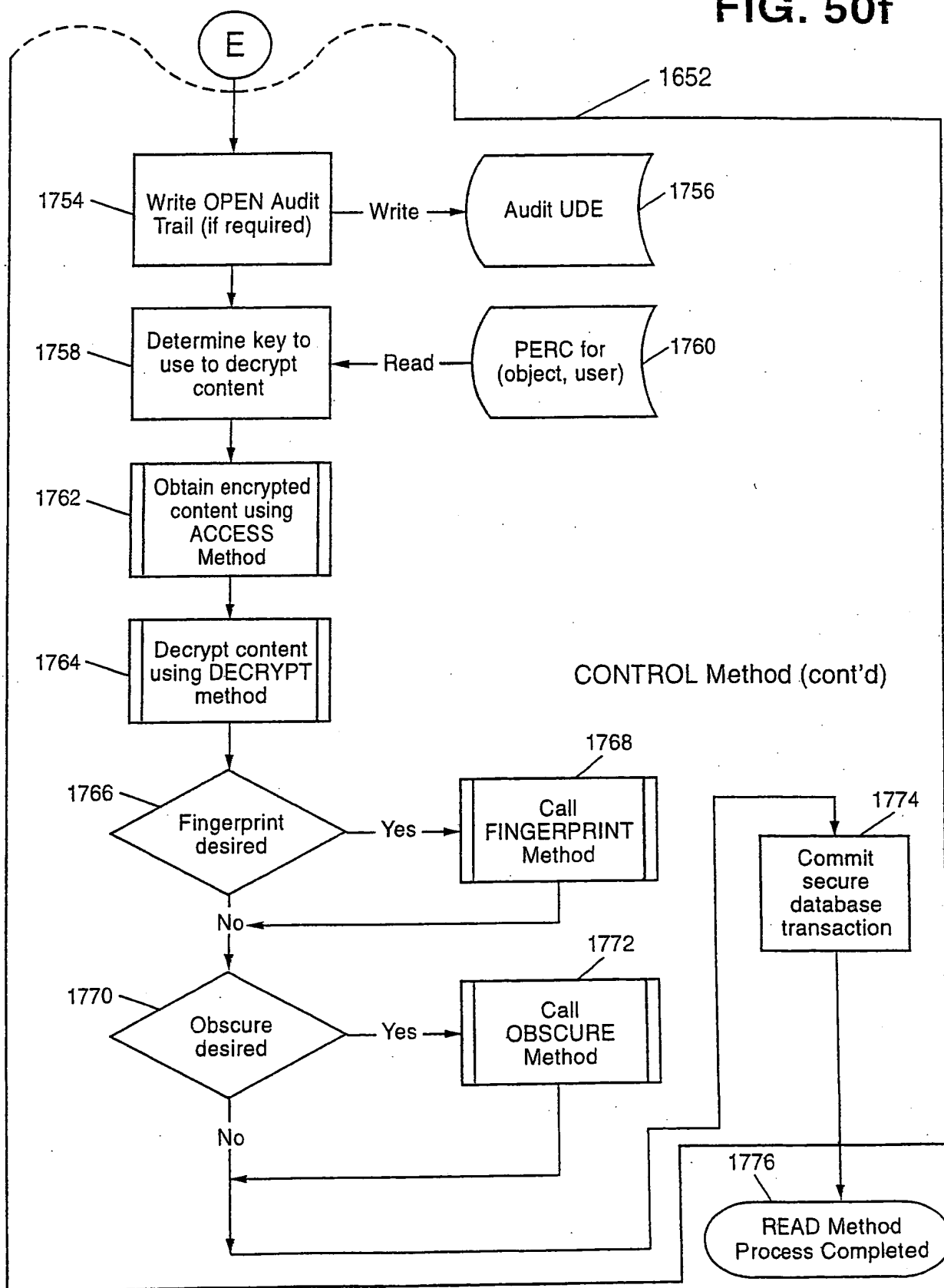


FIG. 50e



FIG. 50f



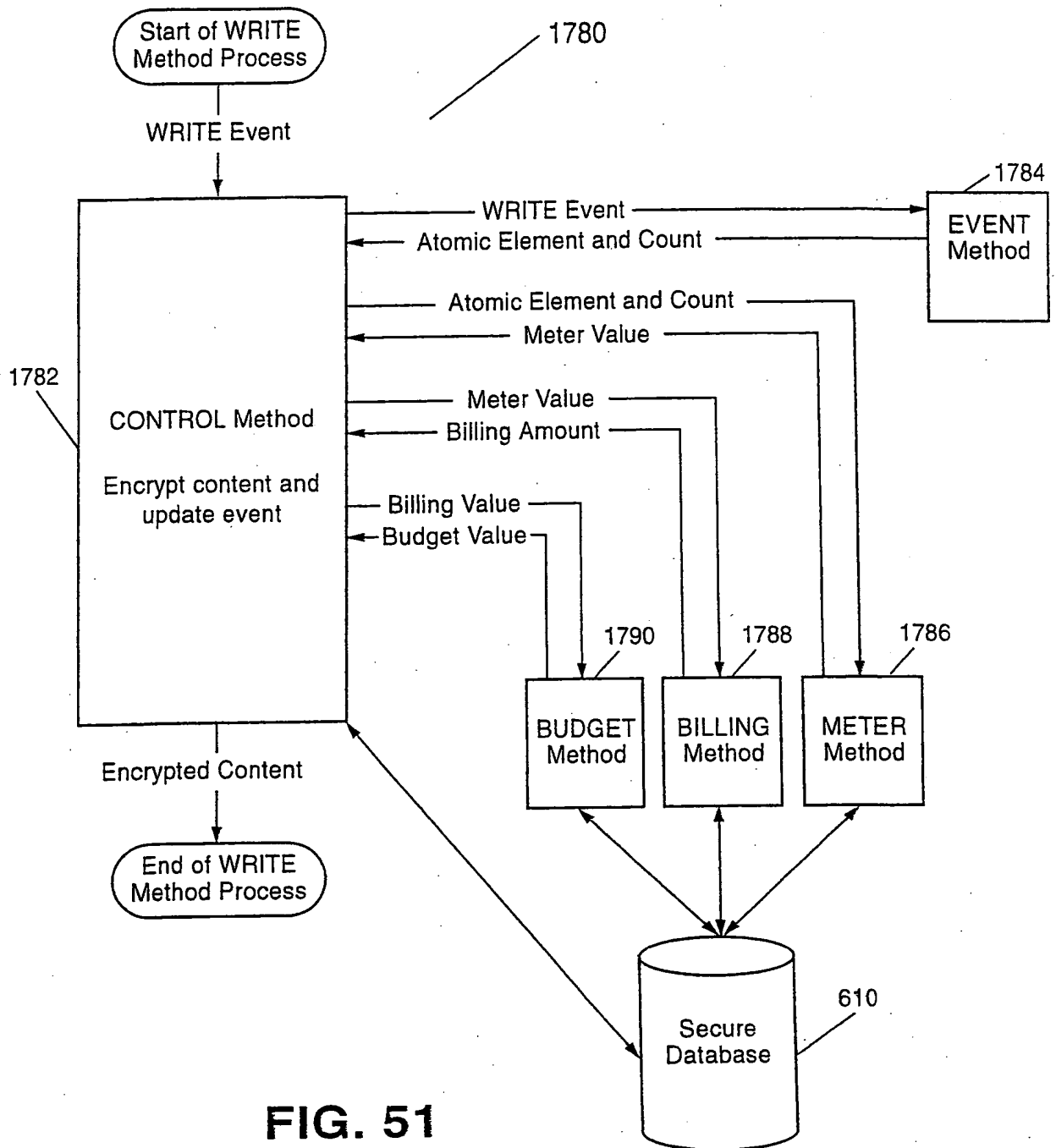
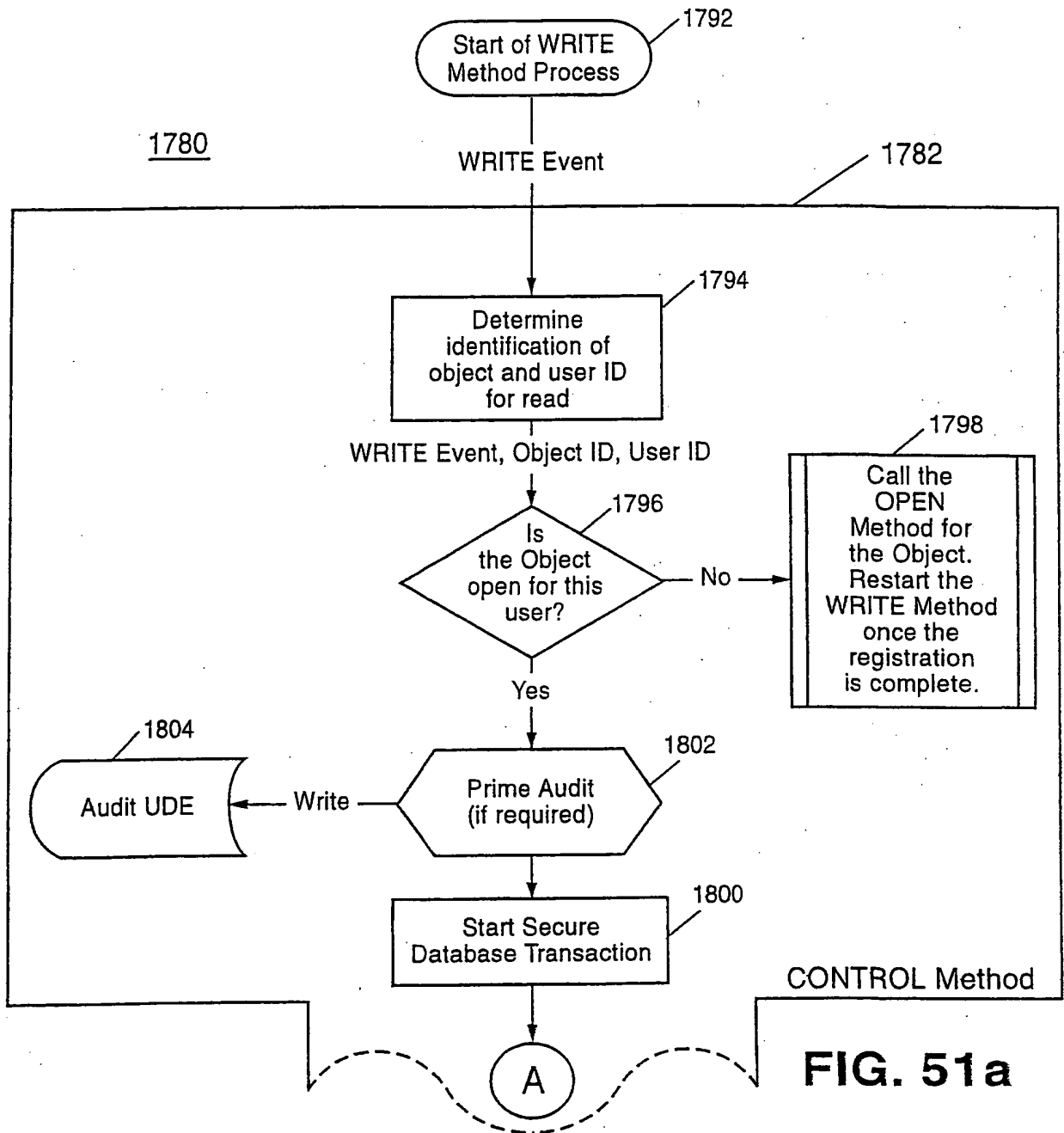


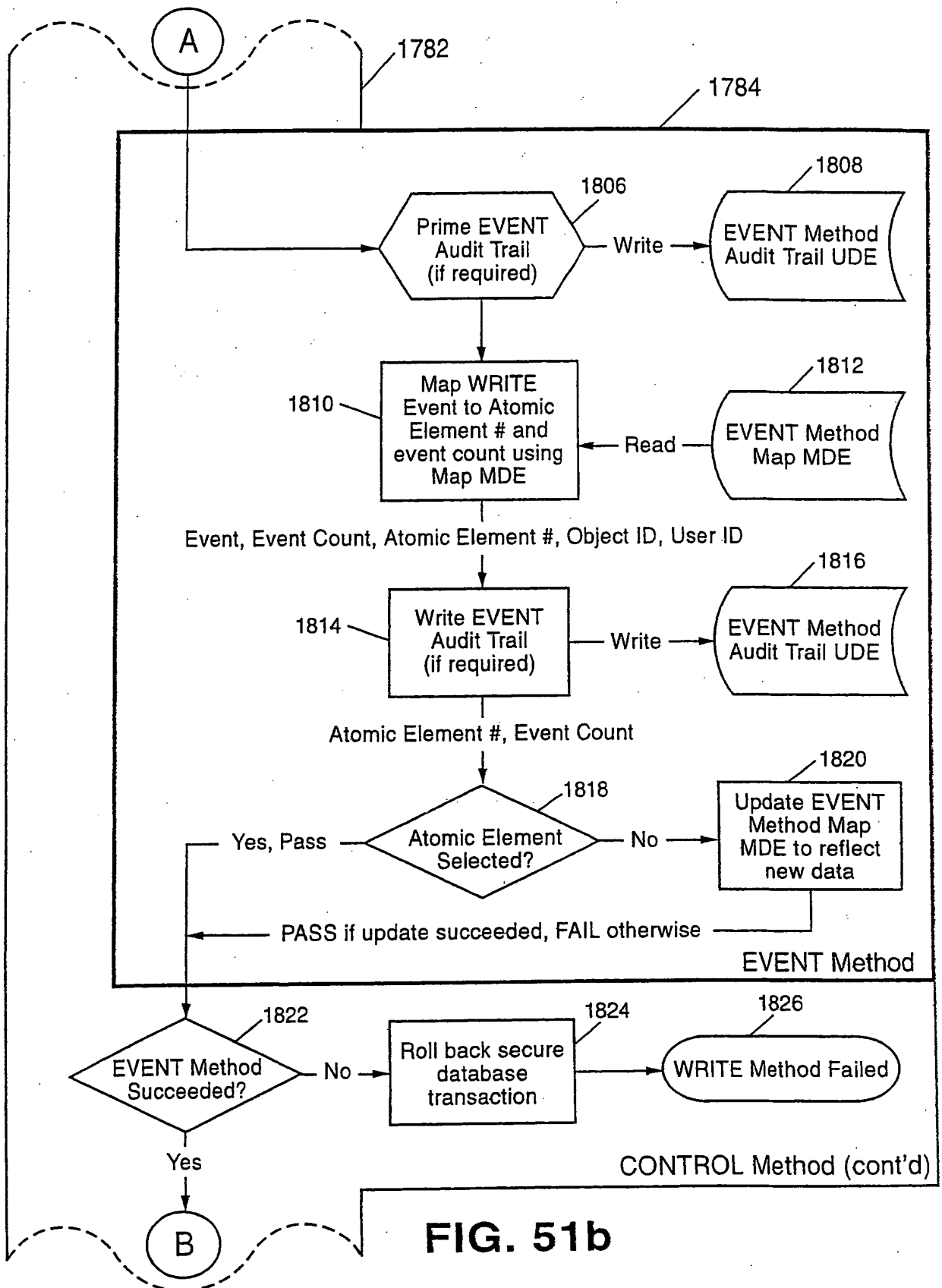
FIG. 51

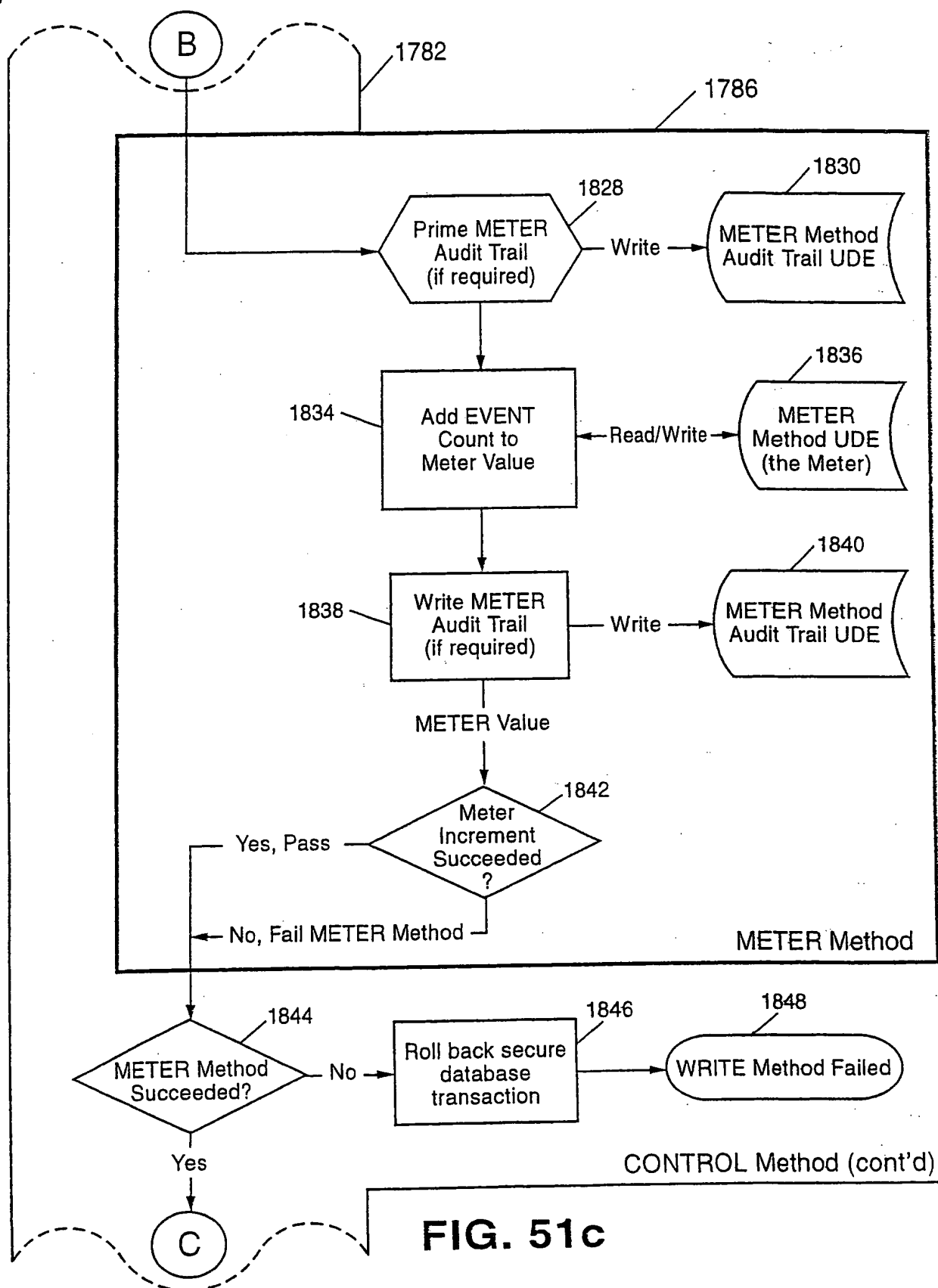


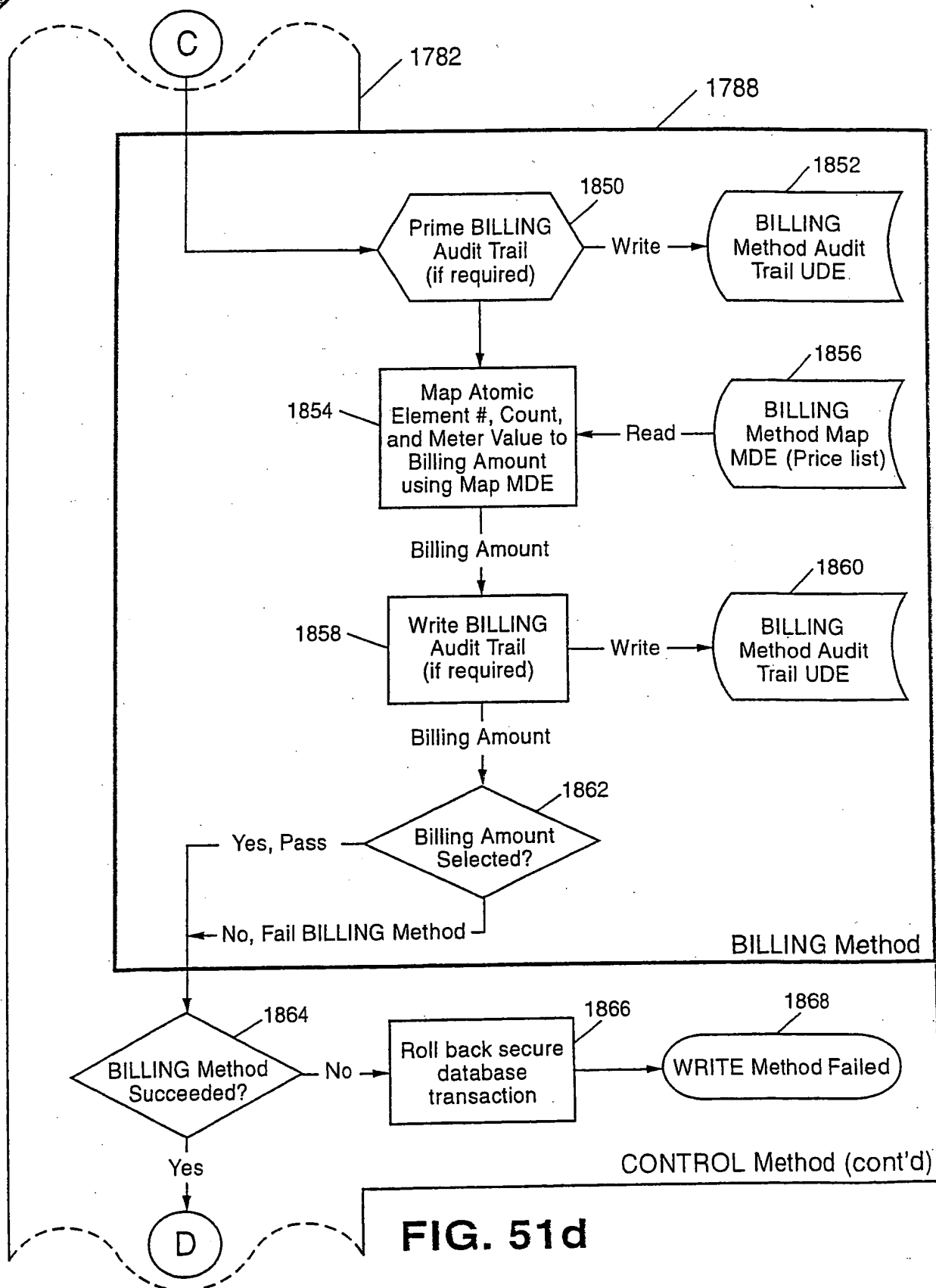
REPLACEMENT SHEET  
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**FIG. 51a**



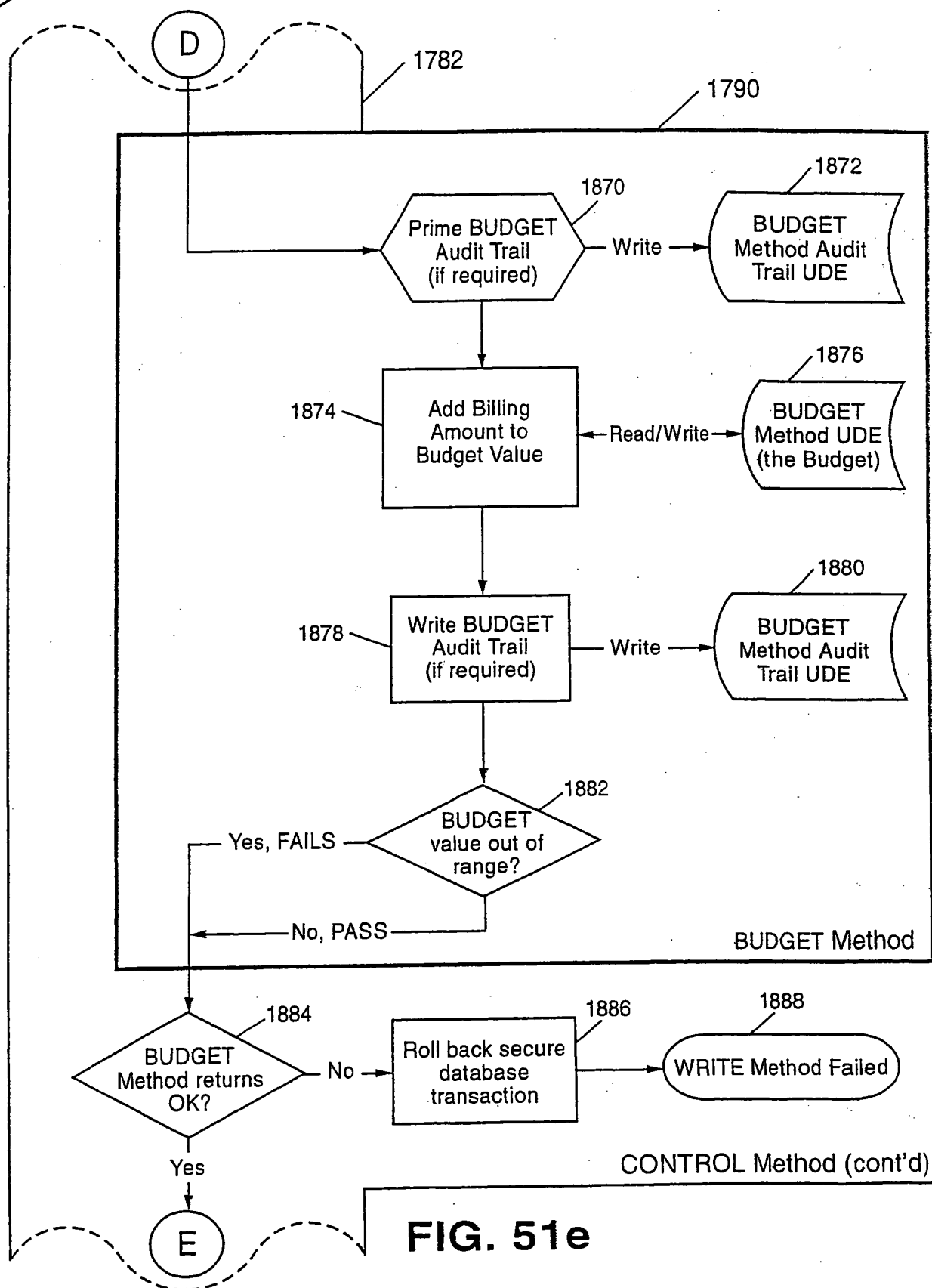


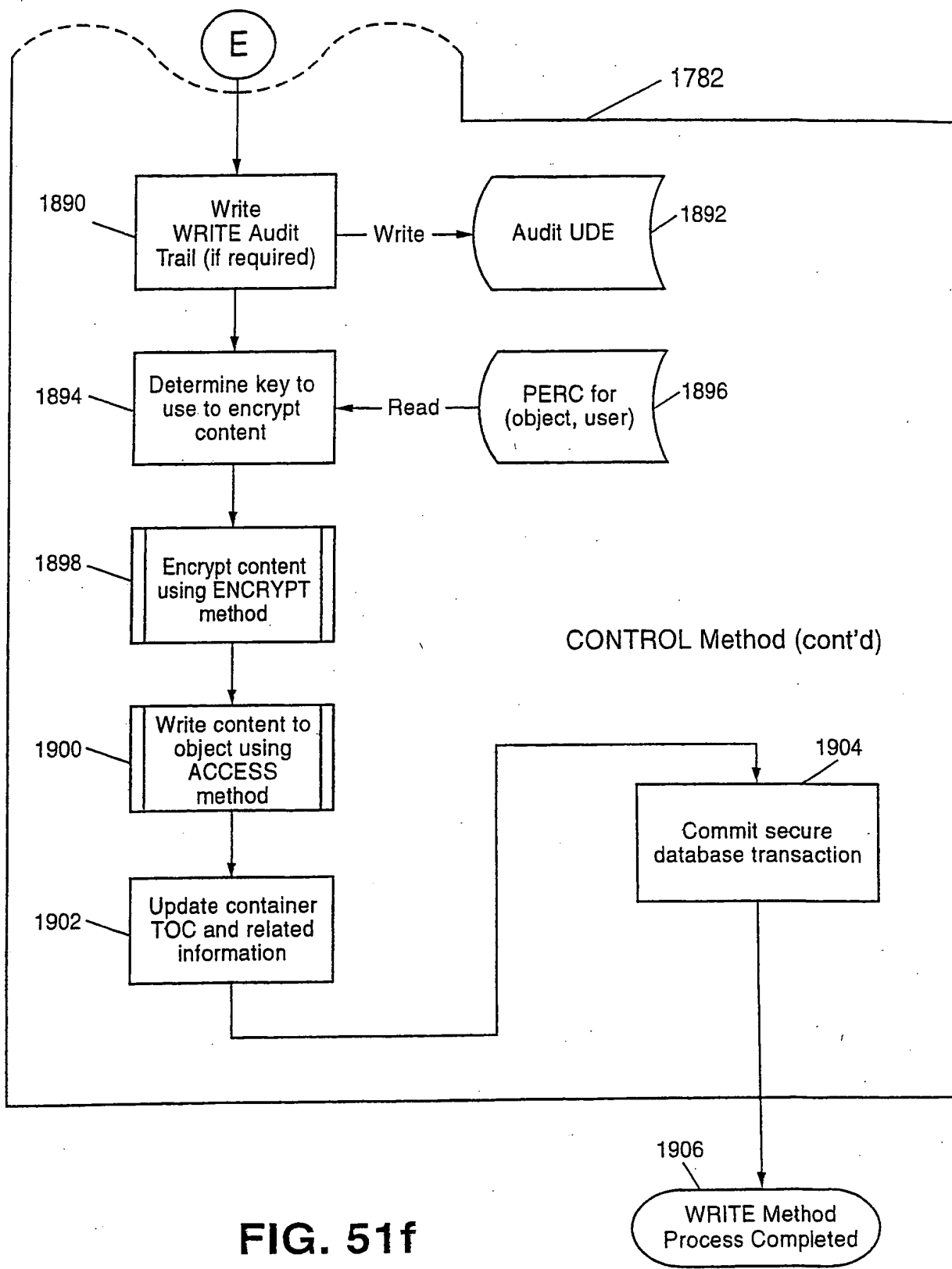


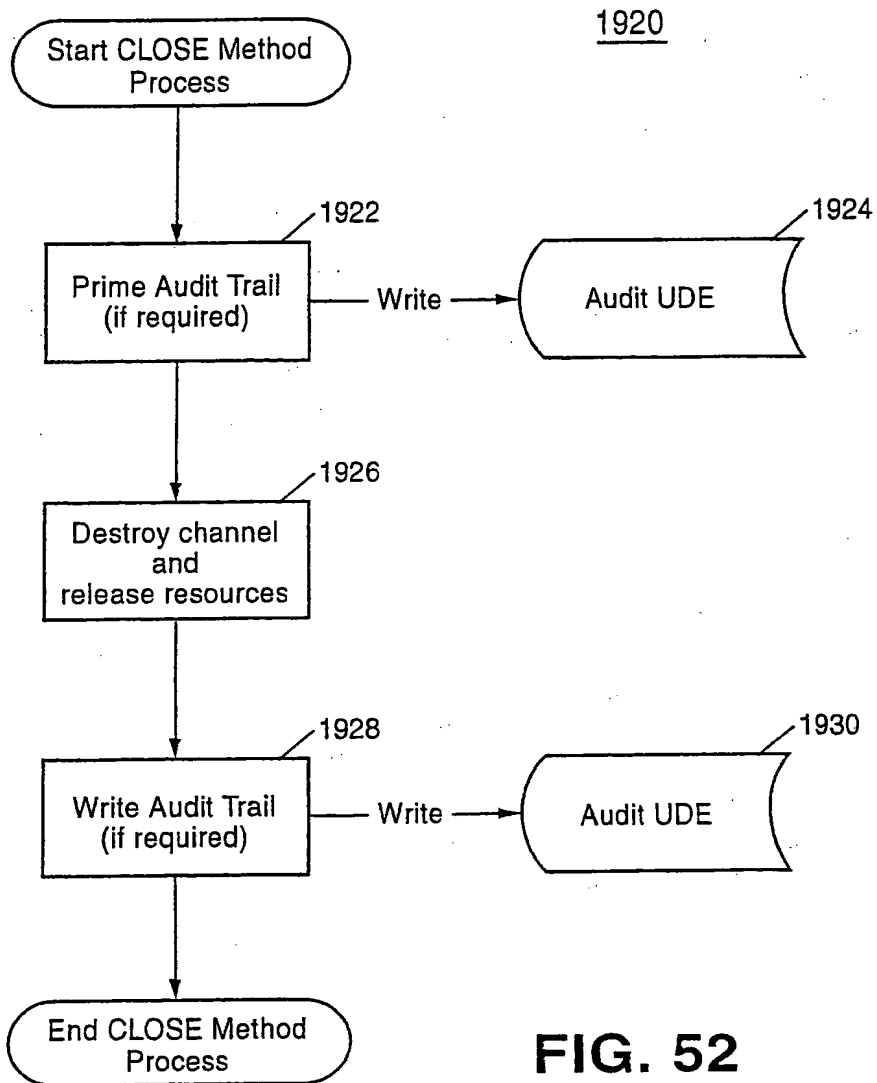




REPLACEMENT SHEET  
APPLN NO.: 09/698,044









REPLACEMENT SHEET  
APPLN NO.: 09/698,044

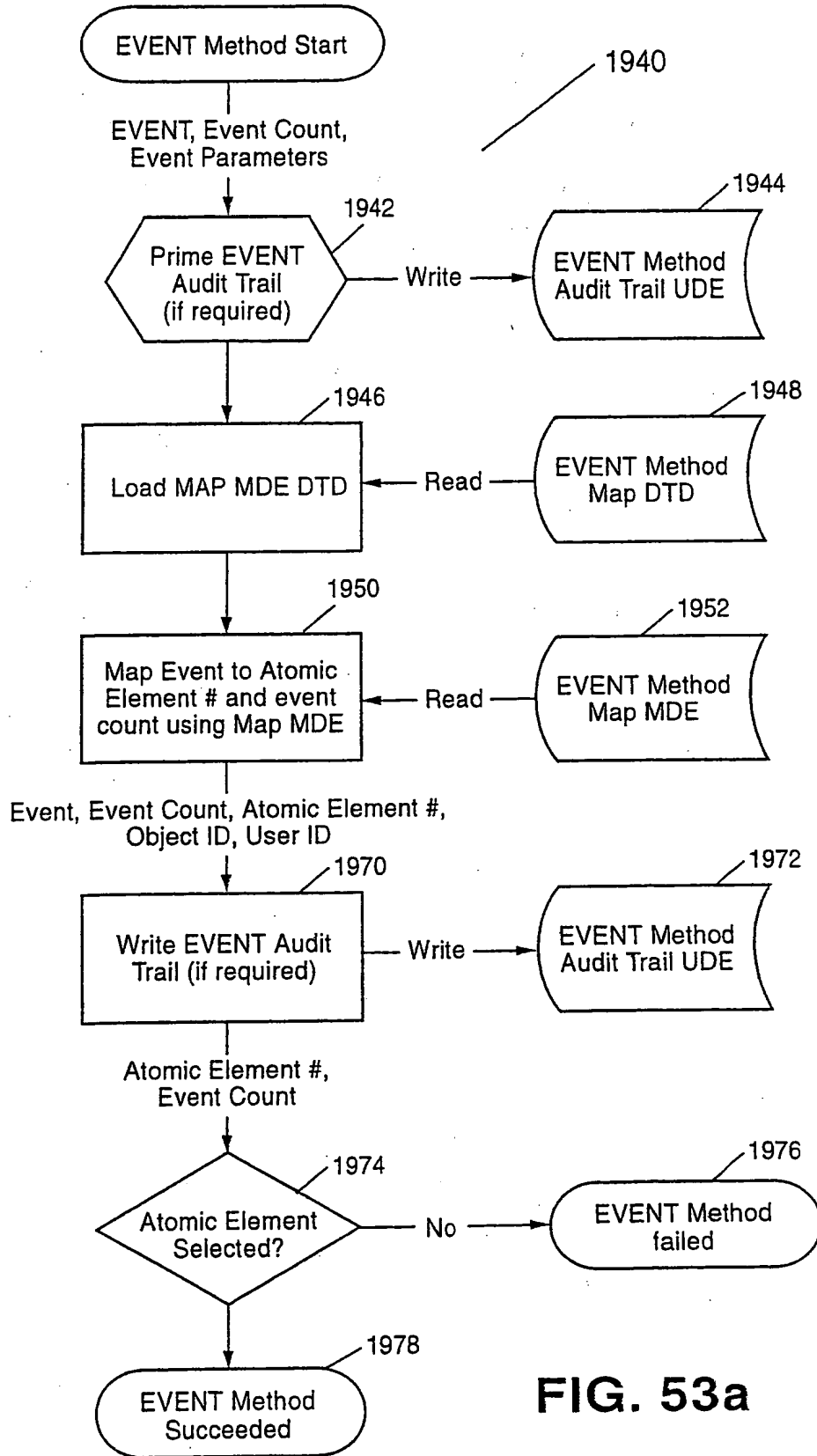


FIG. 53a



REPLACEMENT SHEET  
APPLN NO.: 09/698,044

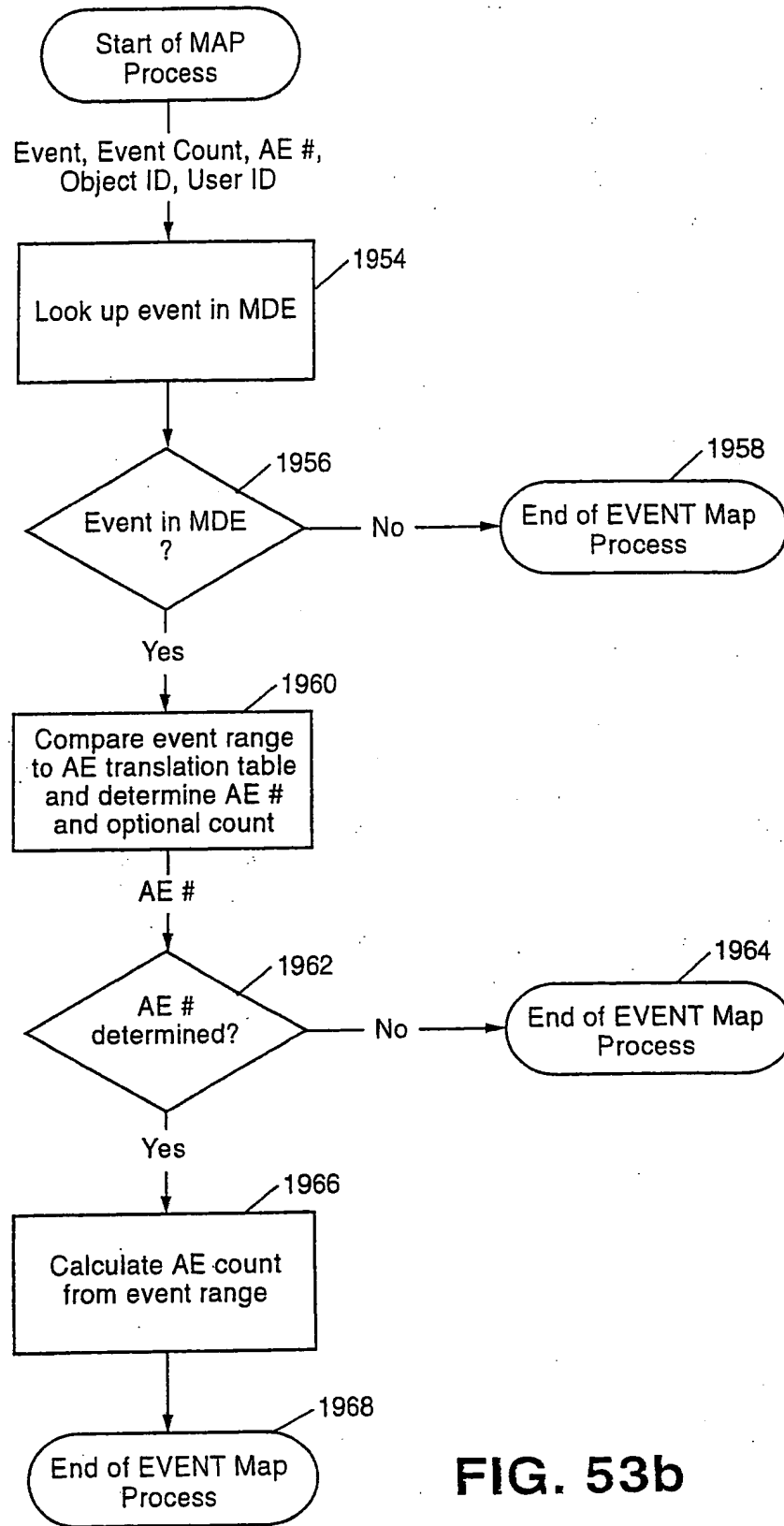


FIG. 53b

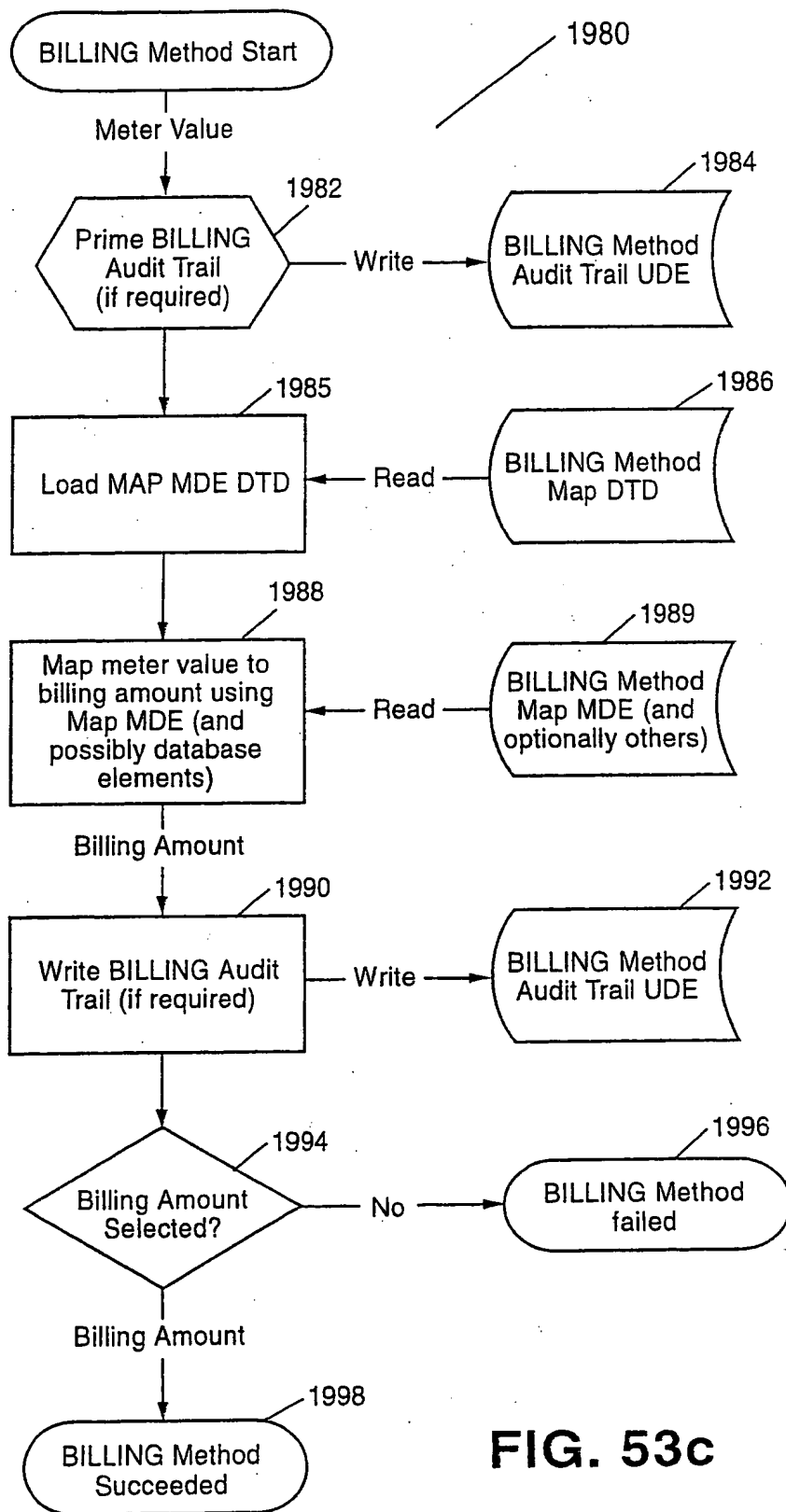
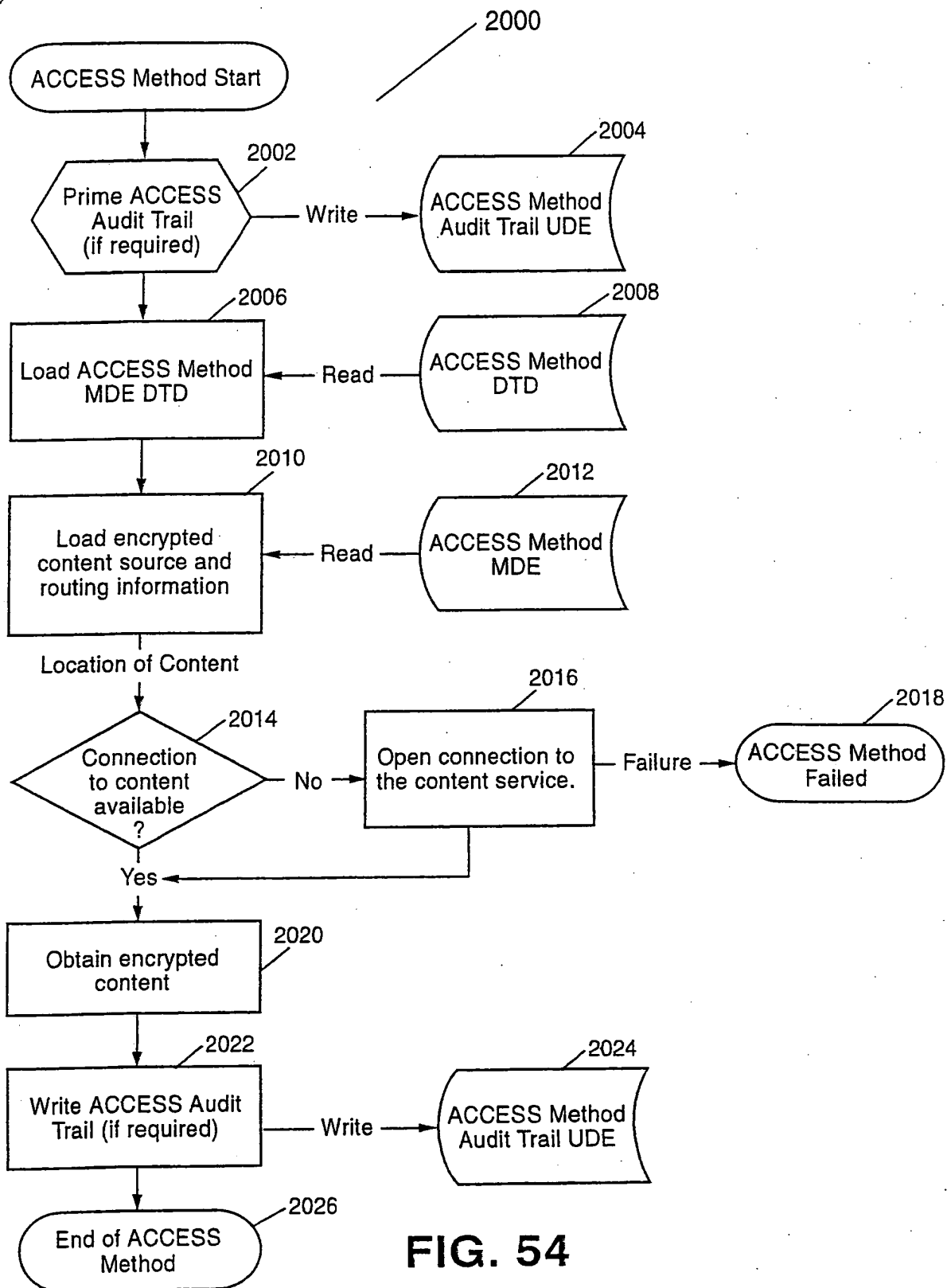


FIG. 53c



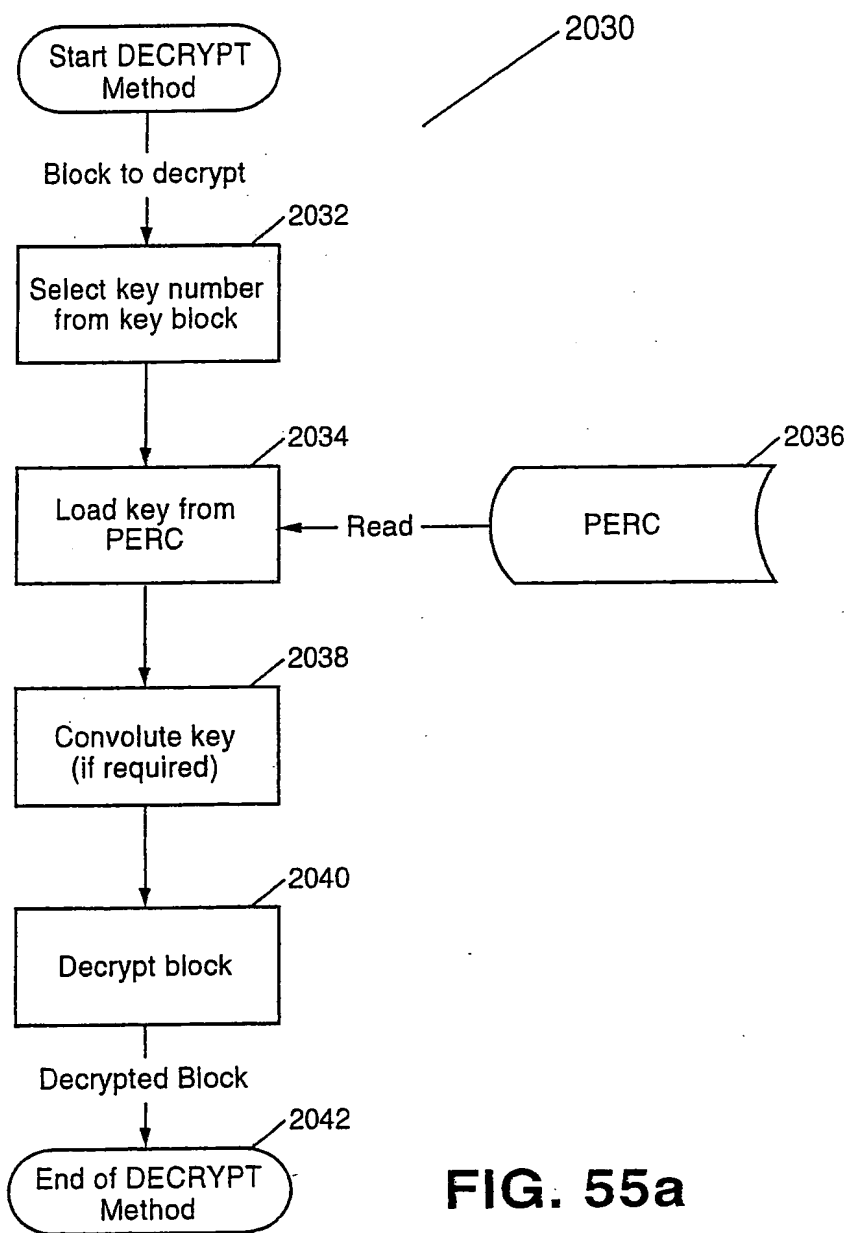
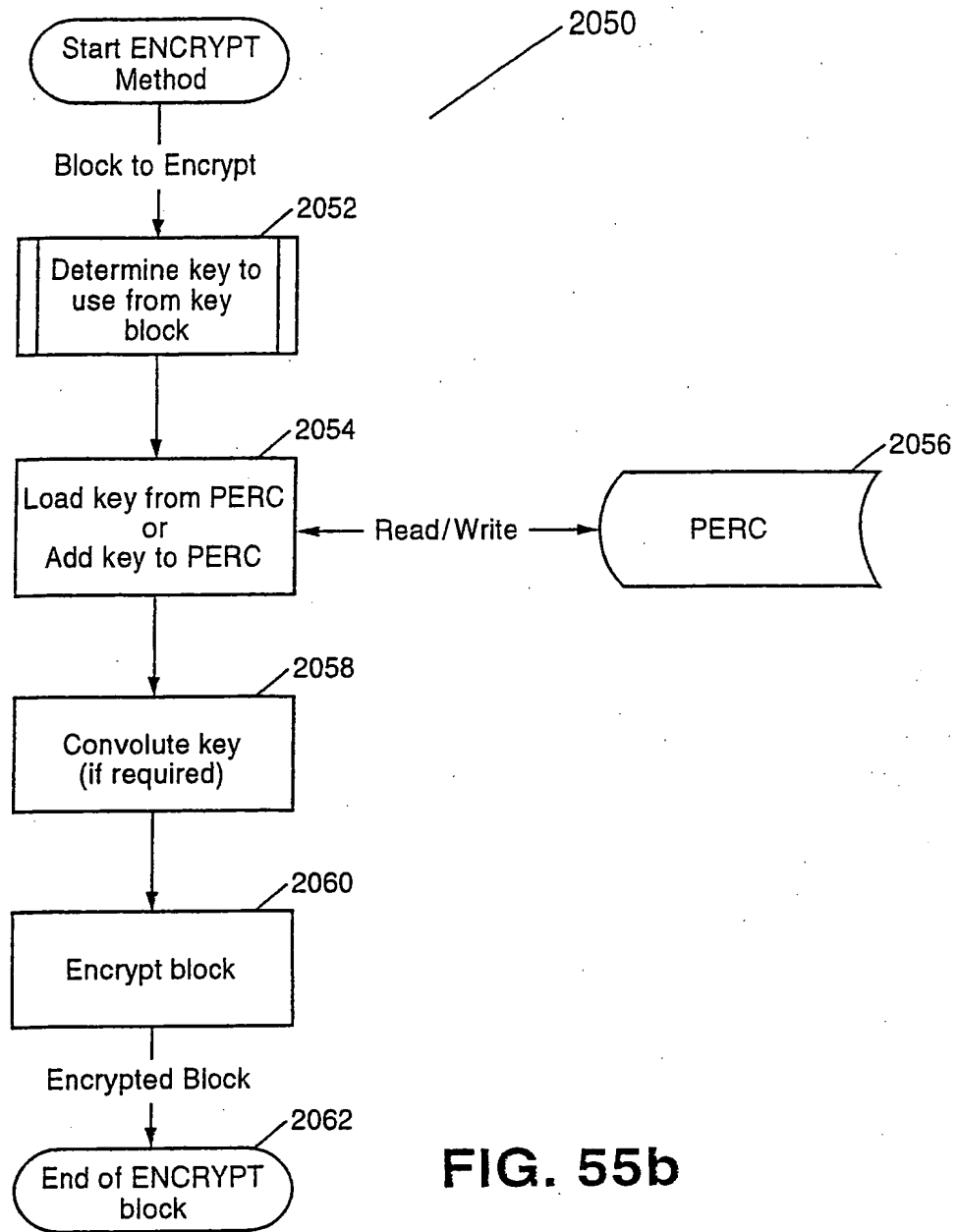


FIG. 55a





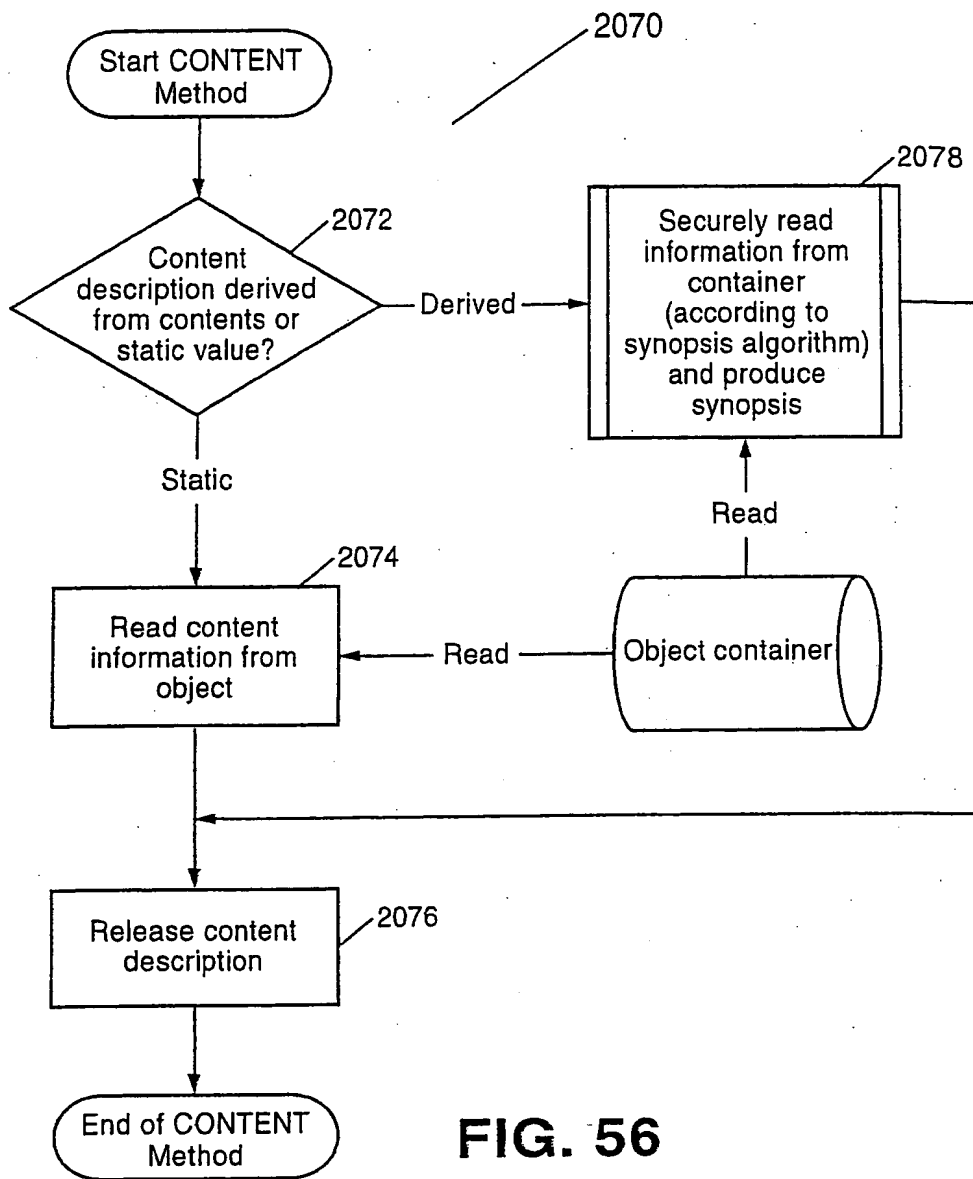


FIG. 56

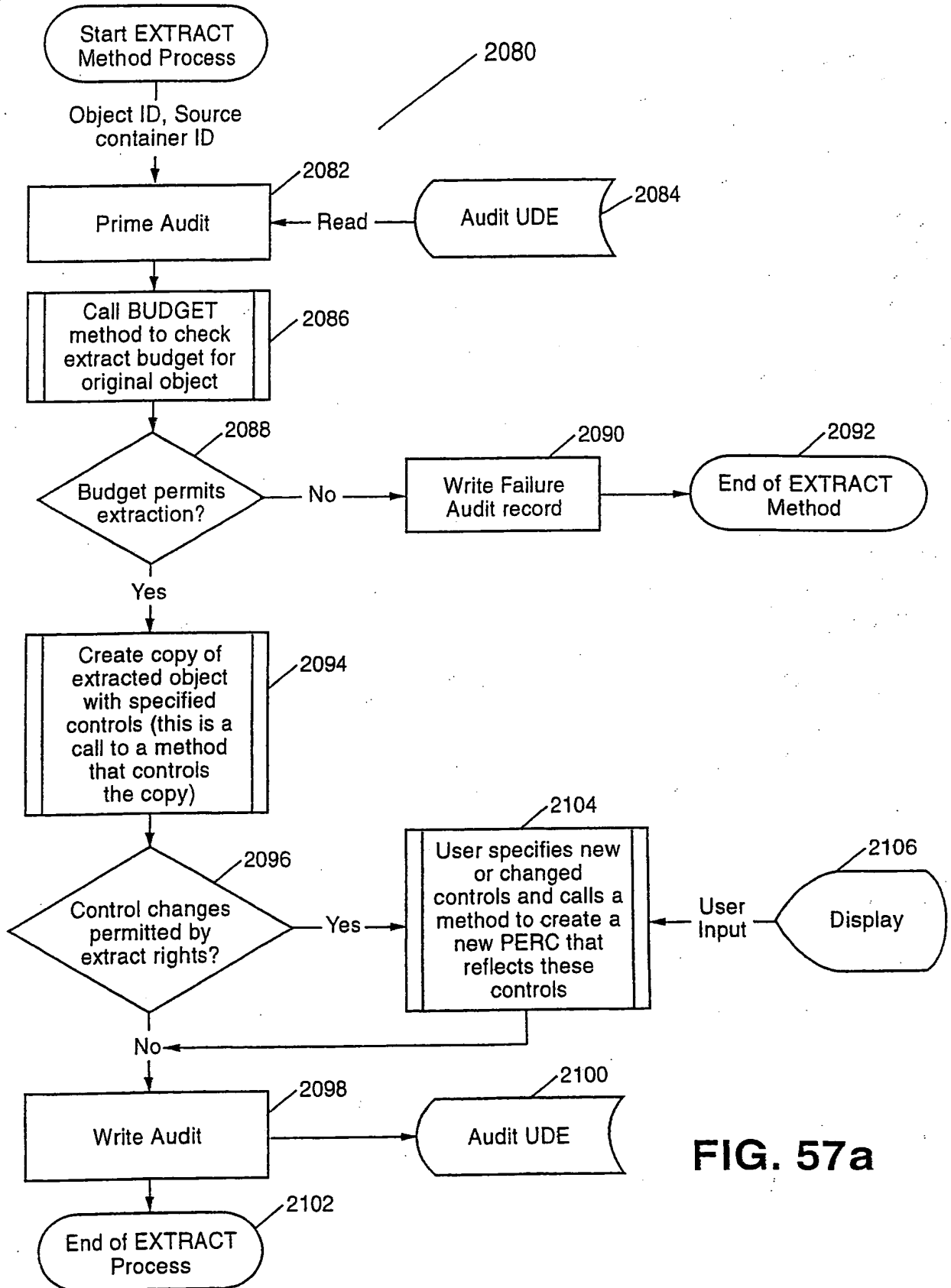


FIG. 57a

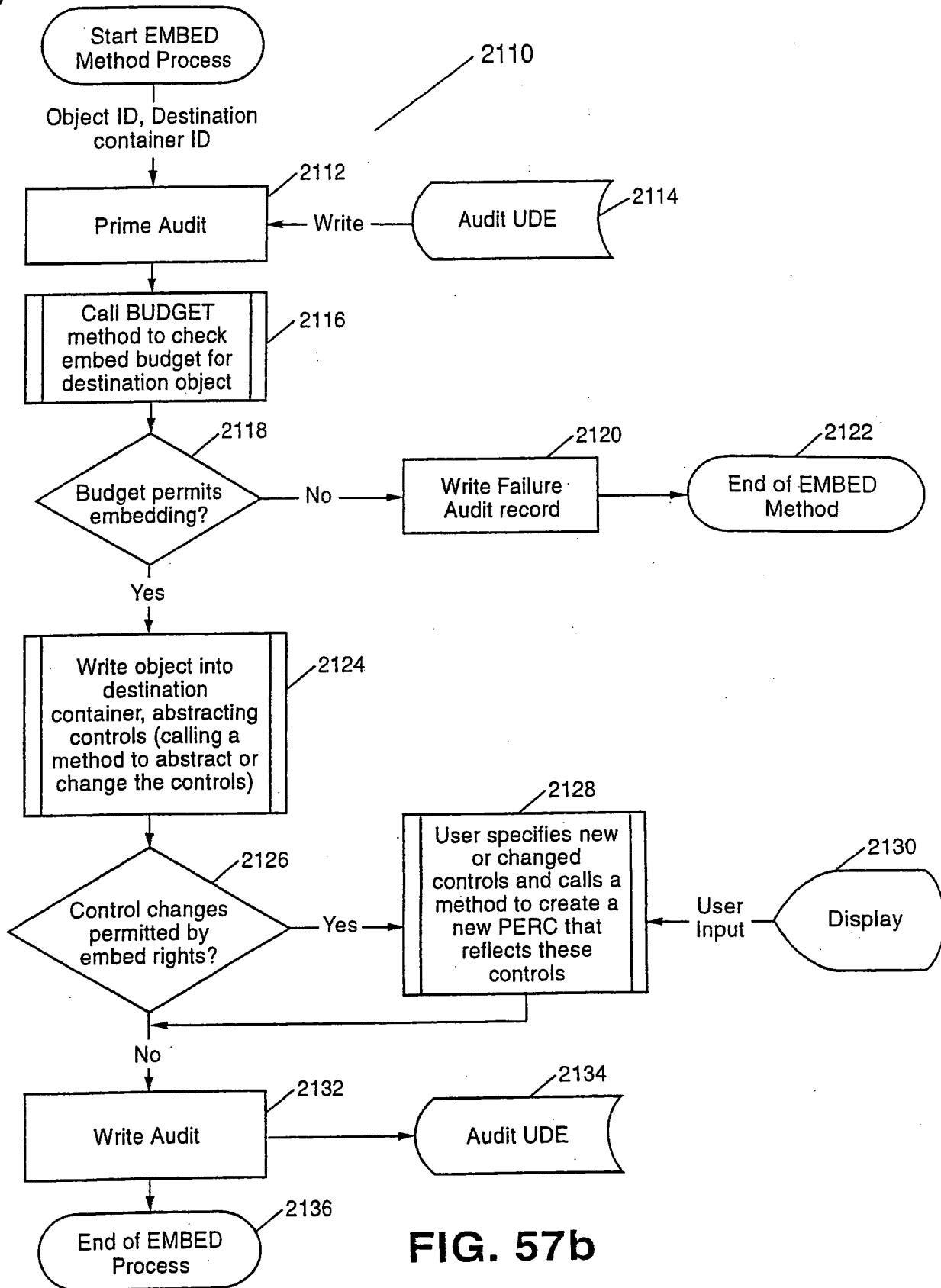


FIG. 57b



REPLACEMENT SHEET  
APPLN NO.: 09/698,044

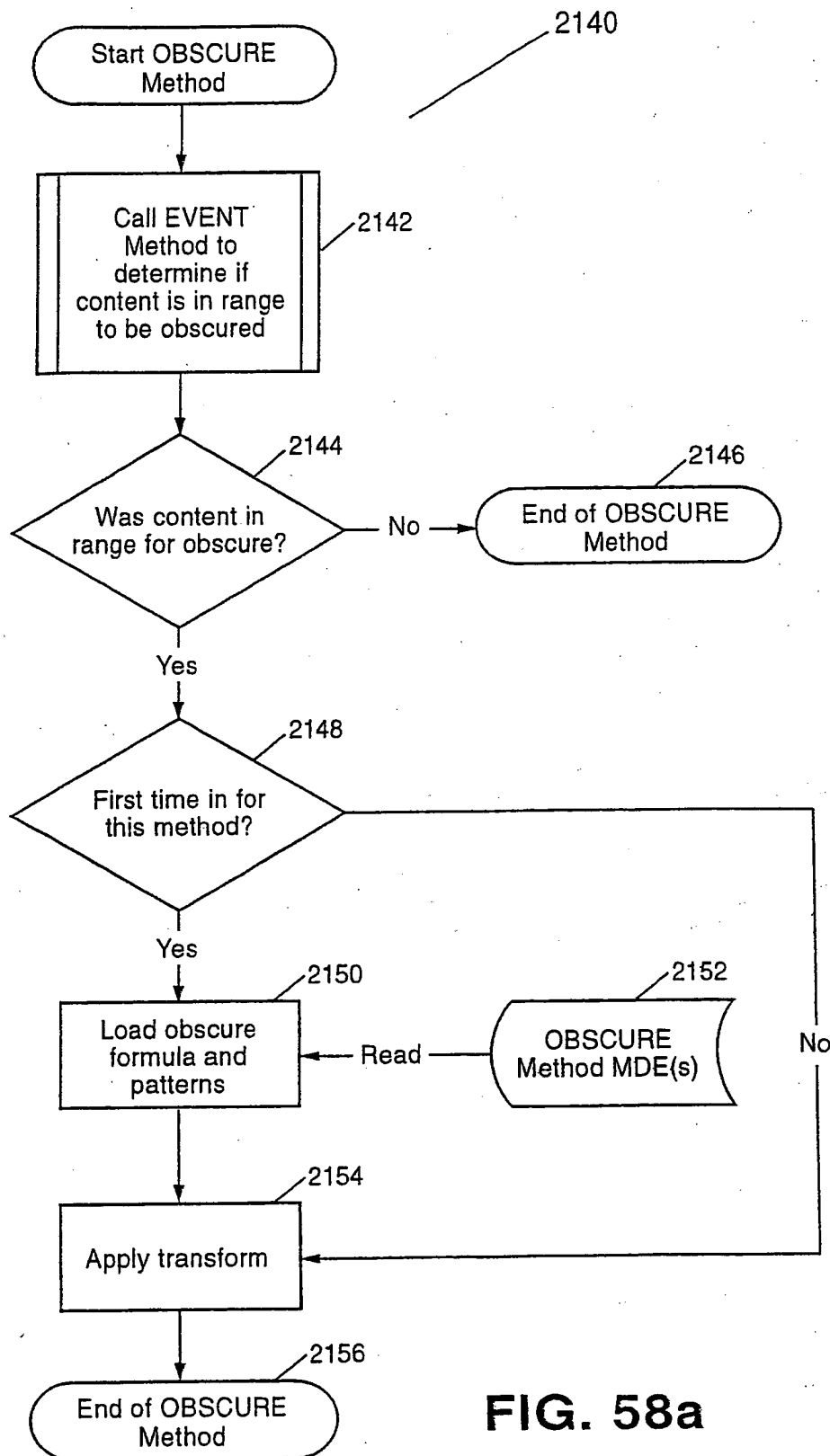


FIG. 58a

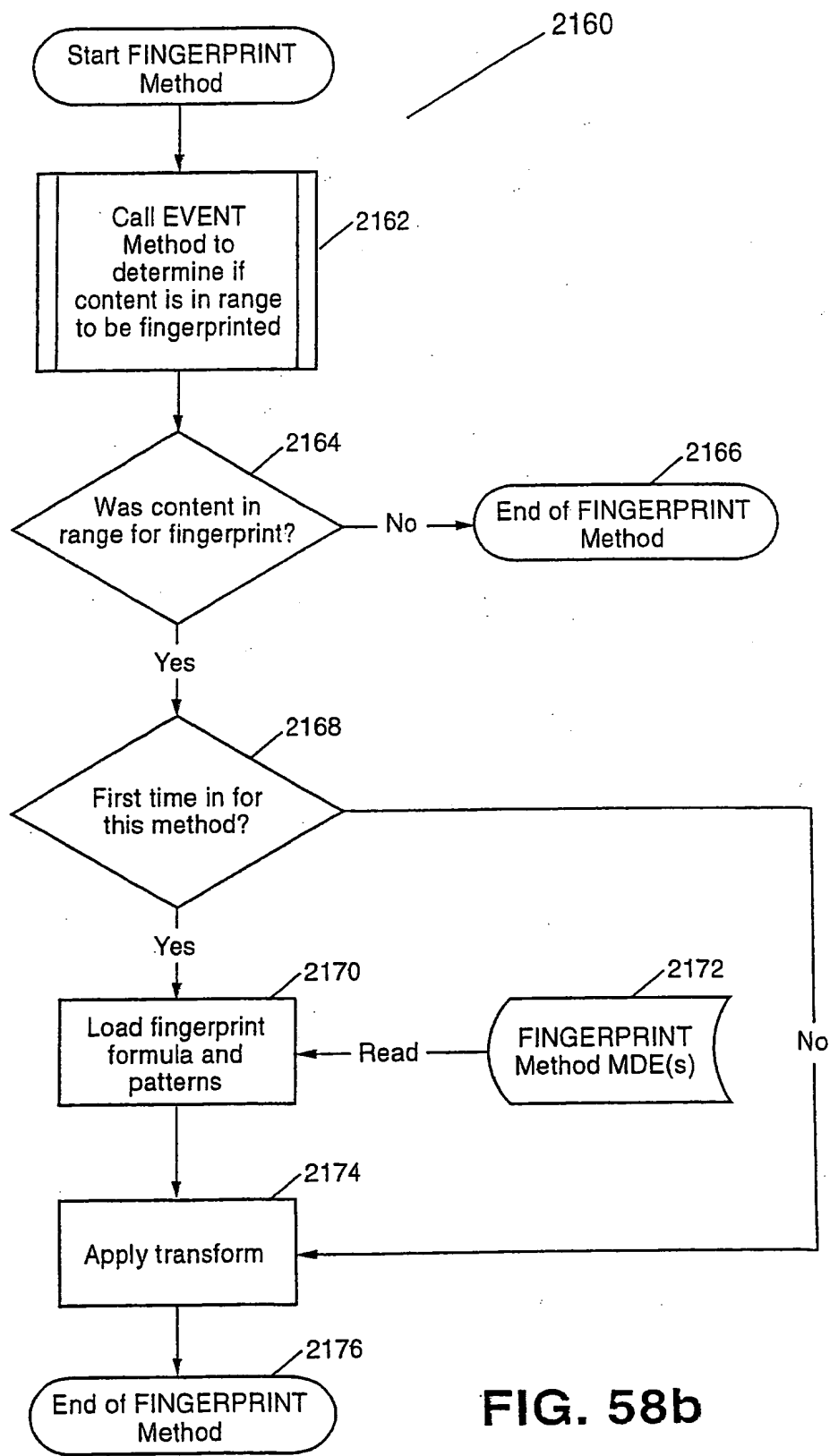


FIG. 58b

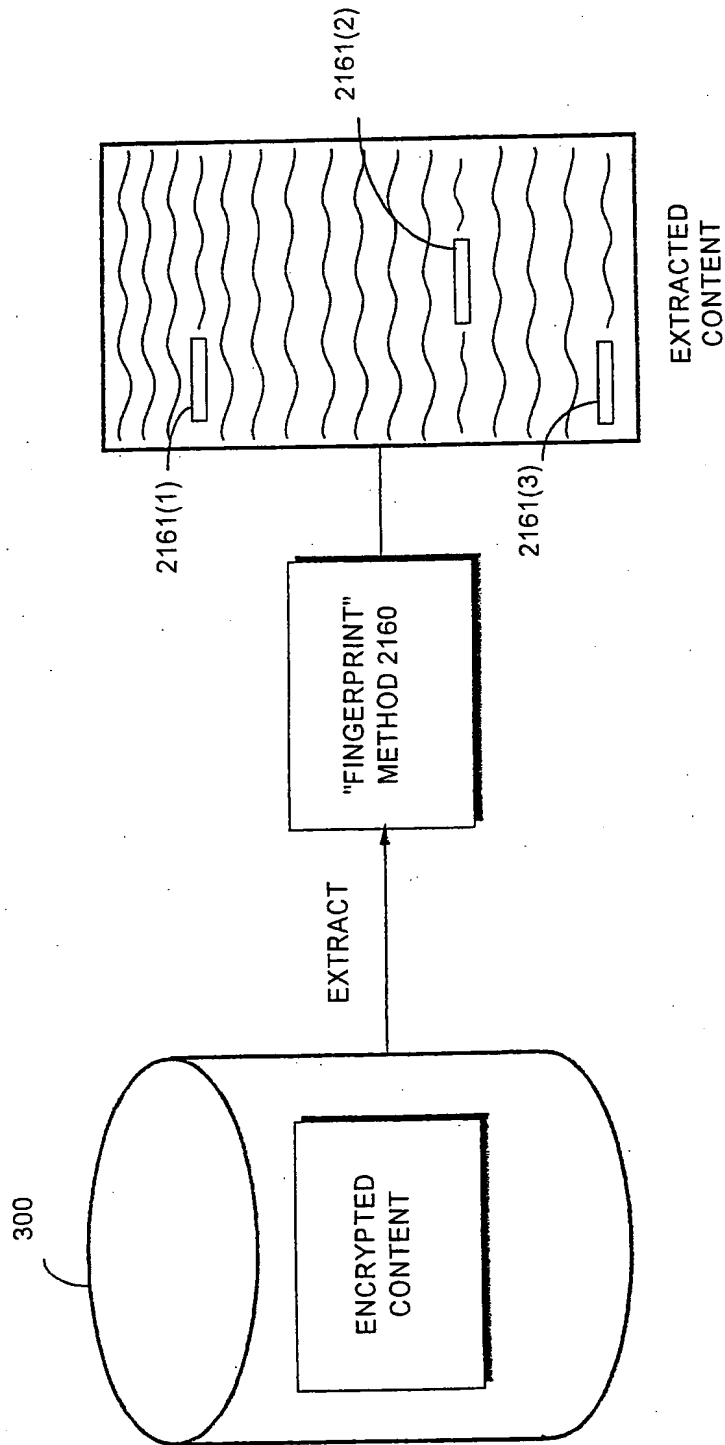
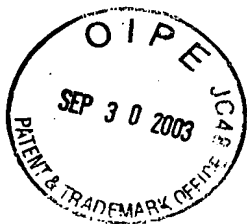


FIG. 58C

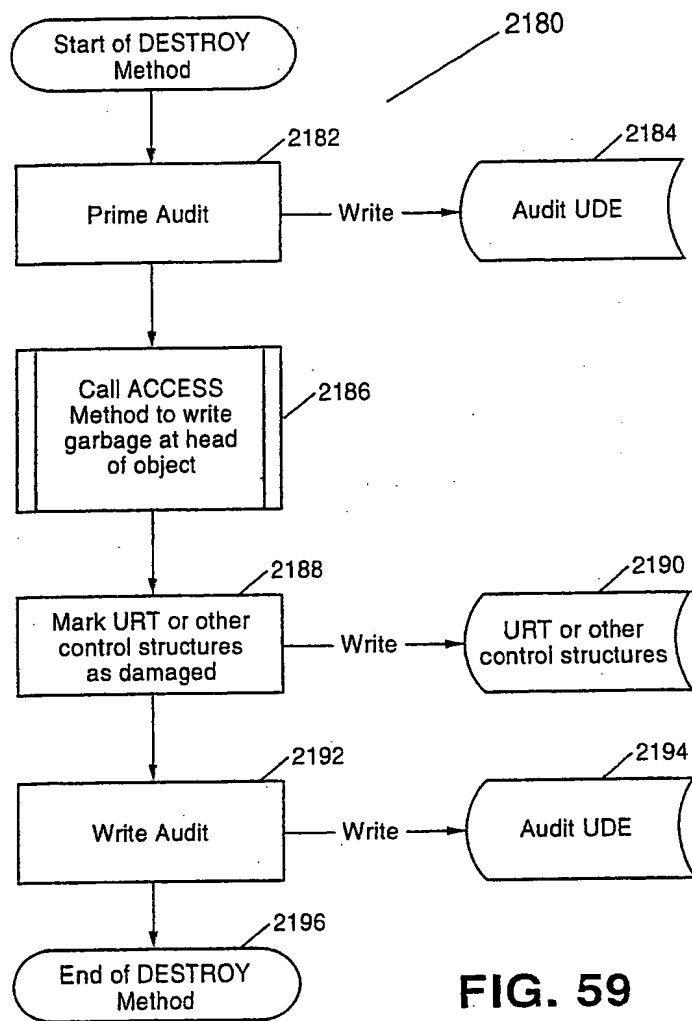


FIG. 59



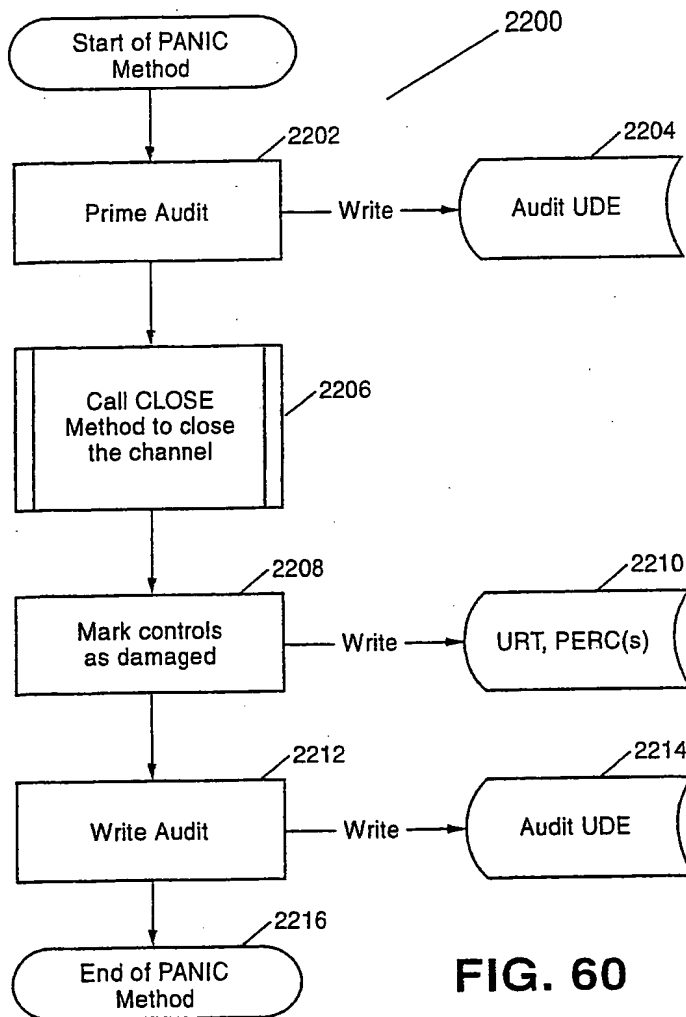


FIG. 60

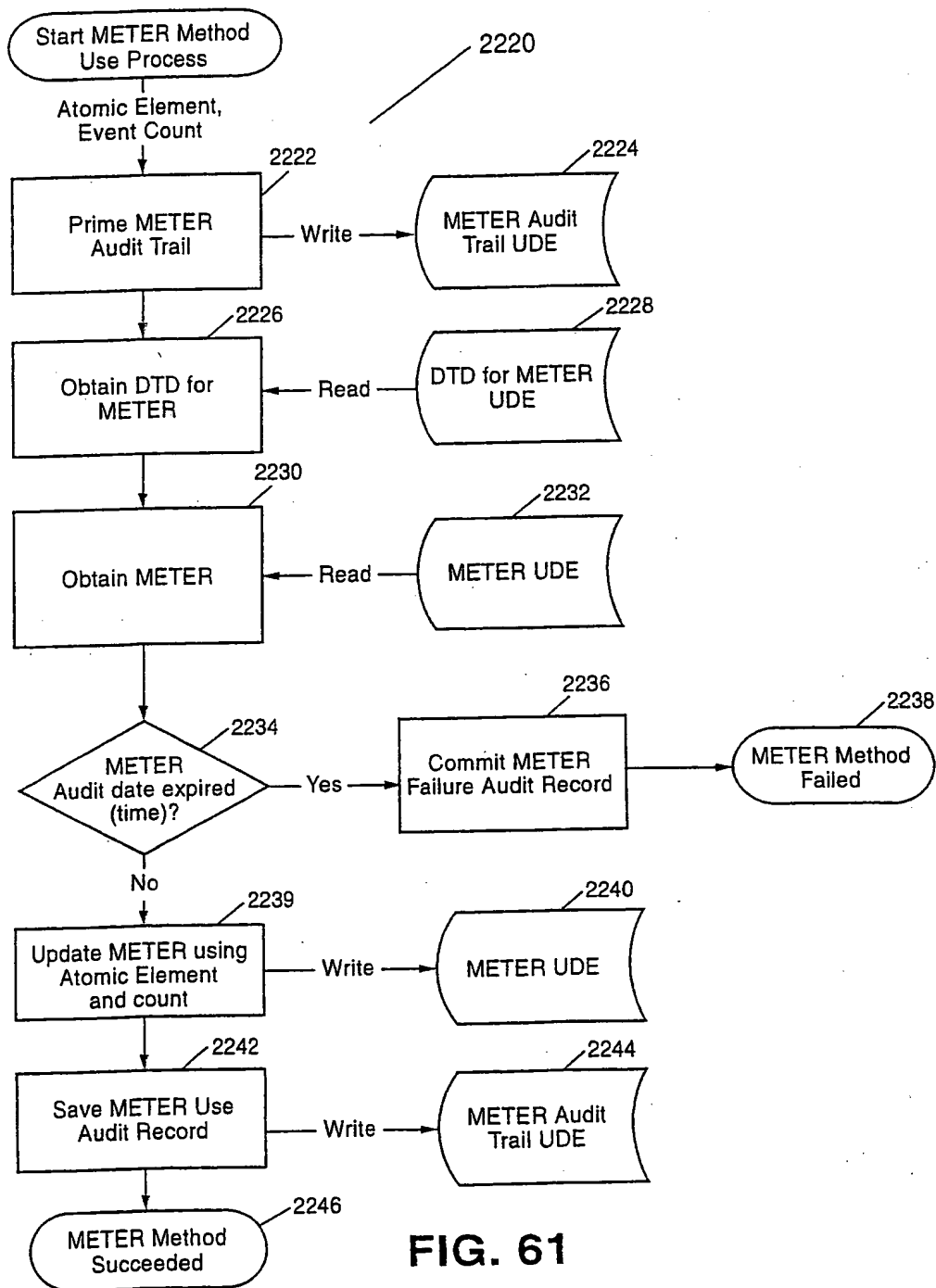
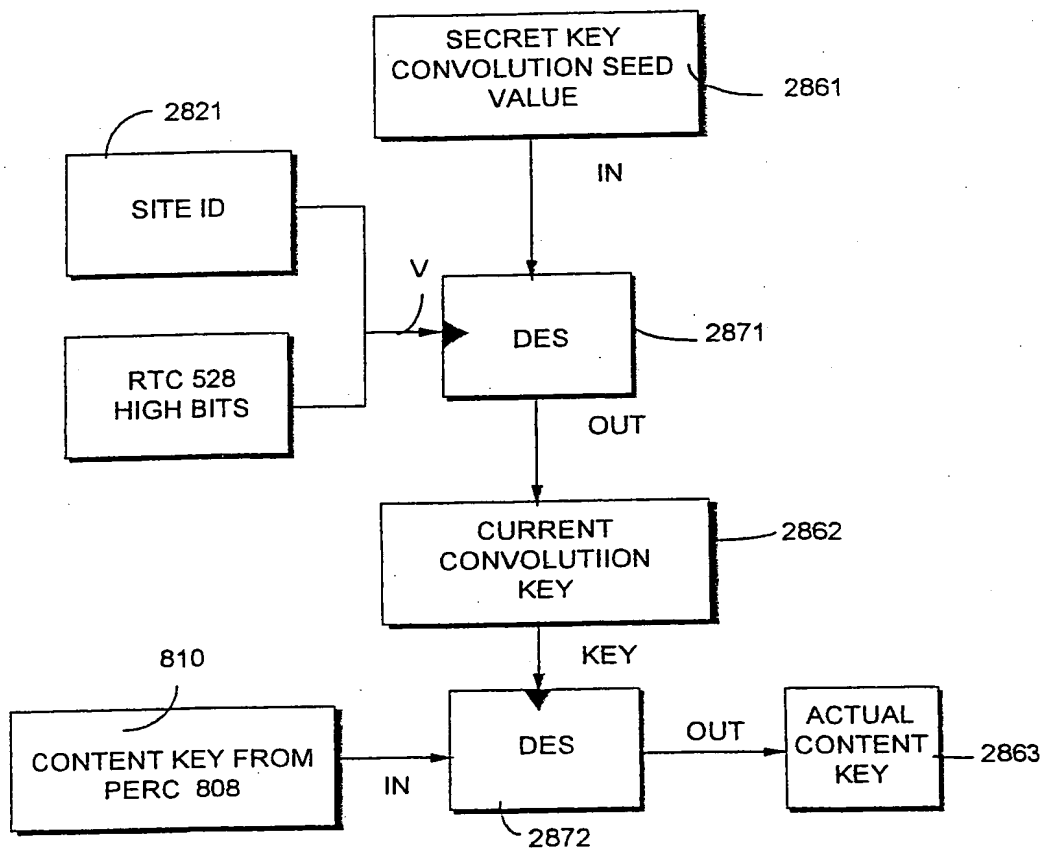


FIG. 61



FIG. 62



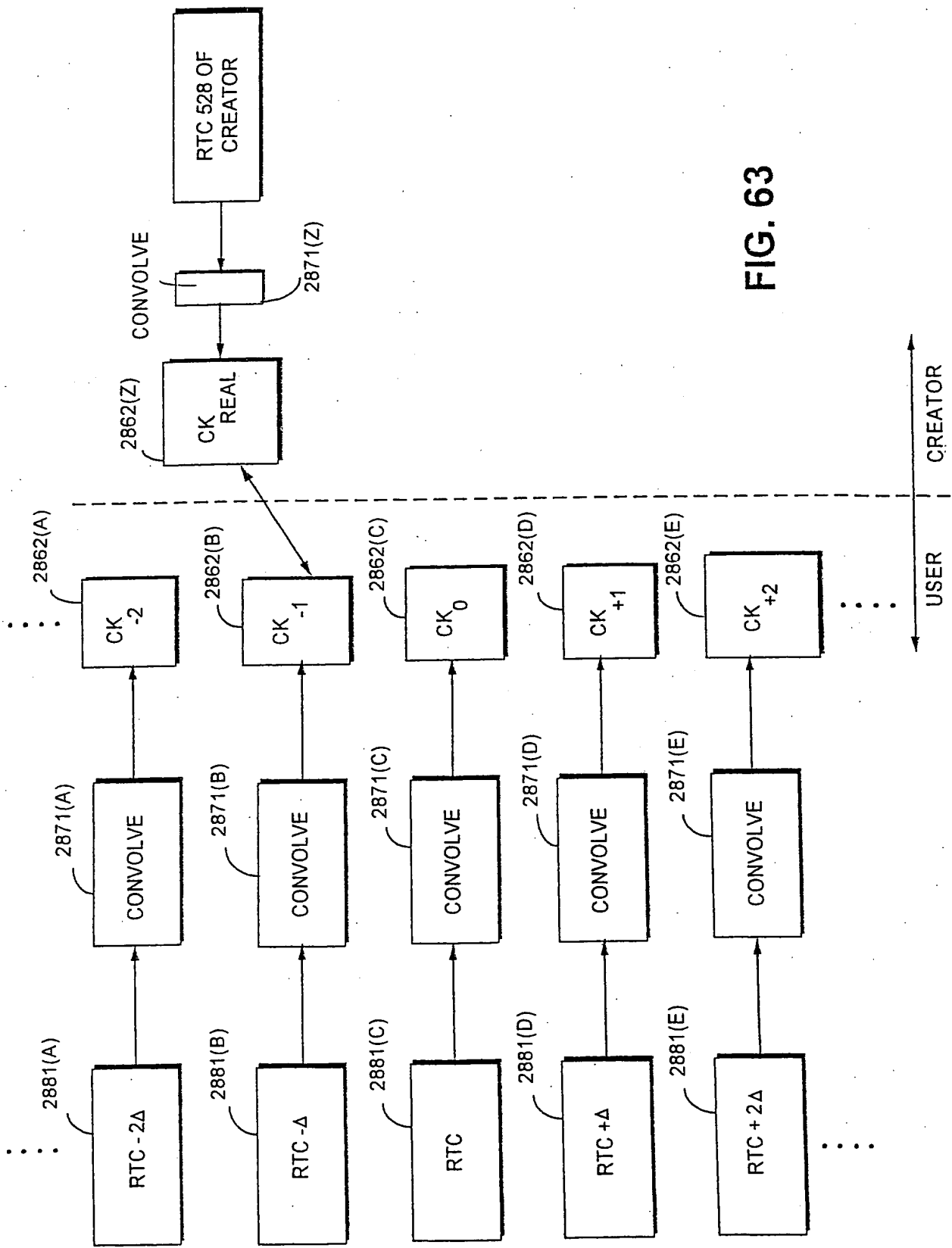
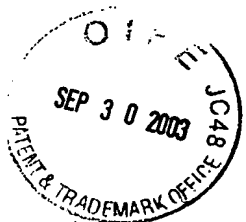


FIG. 63



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FIG. 64

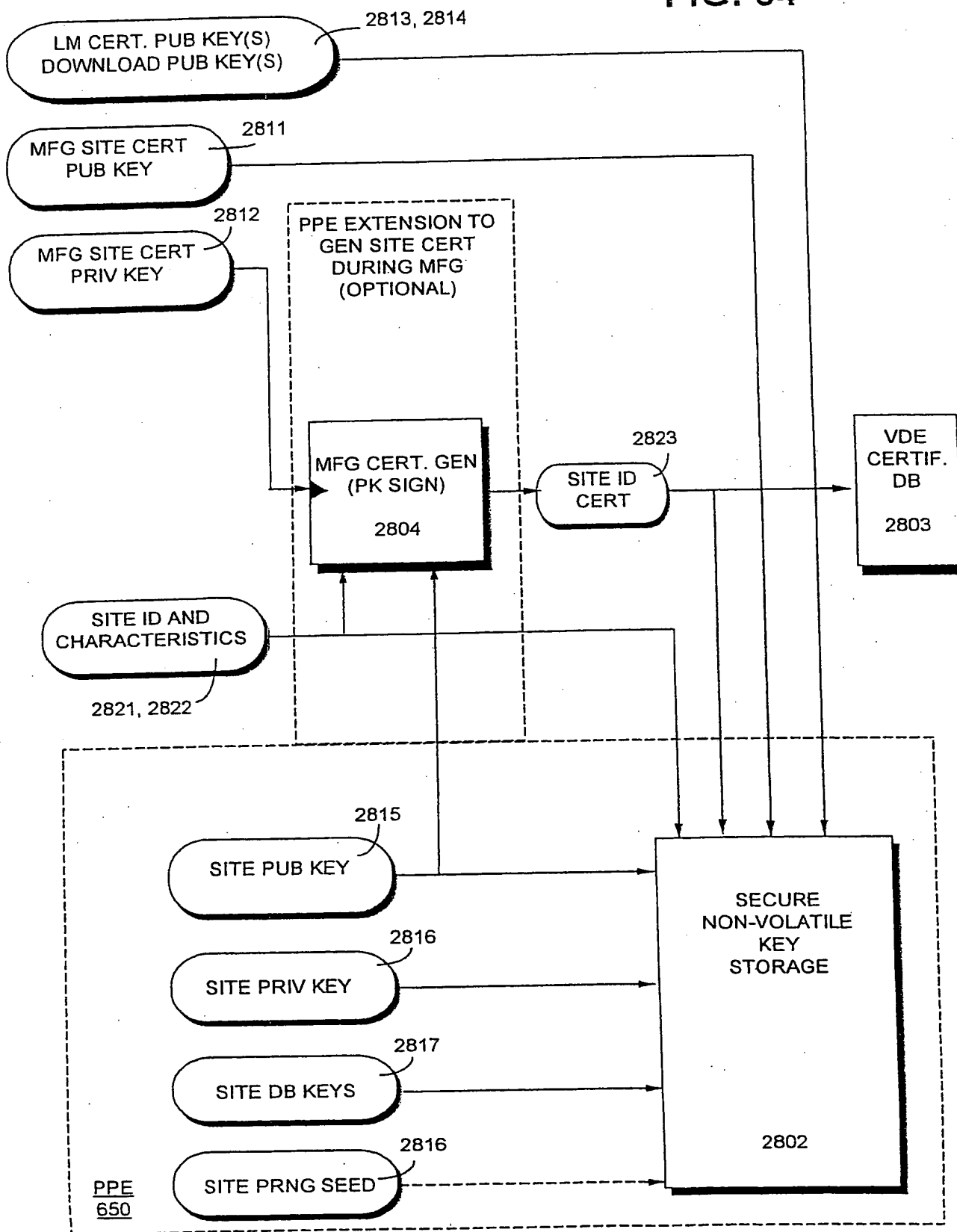




FIG. 65

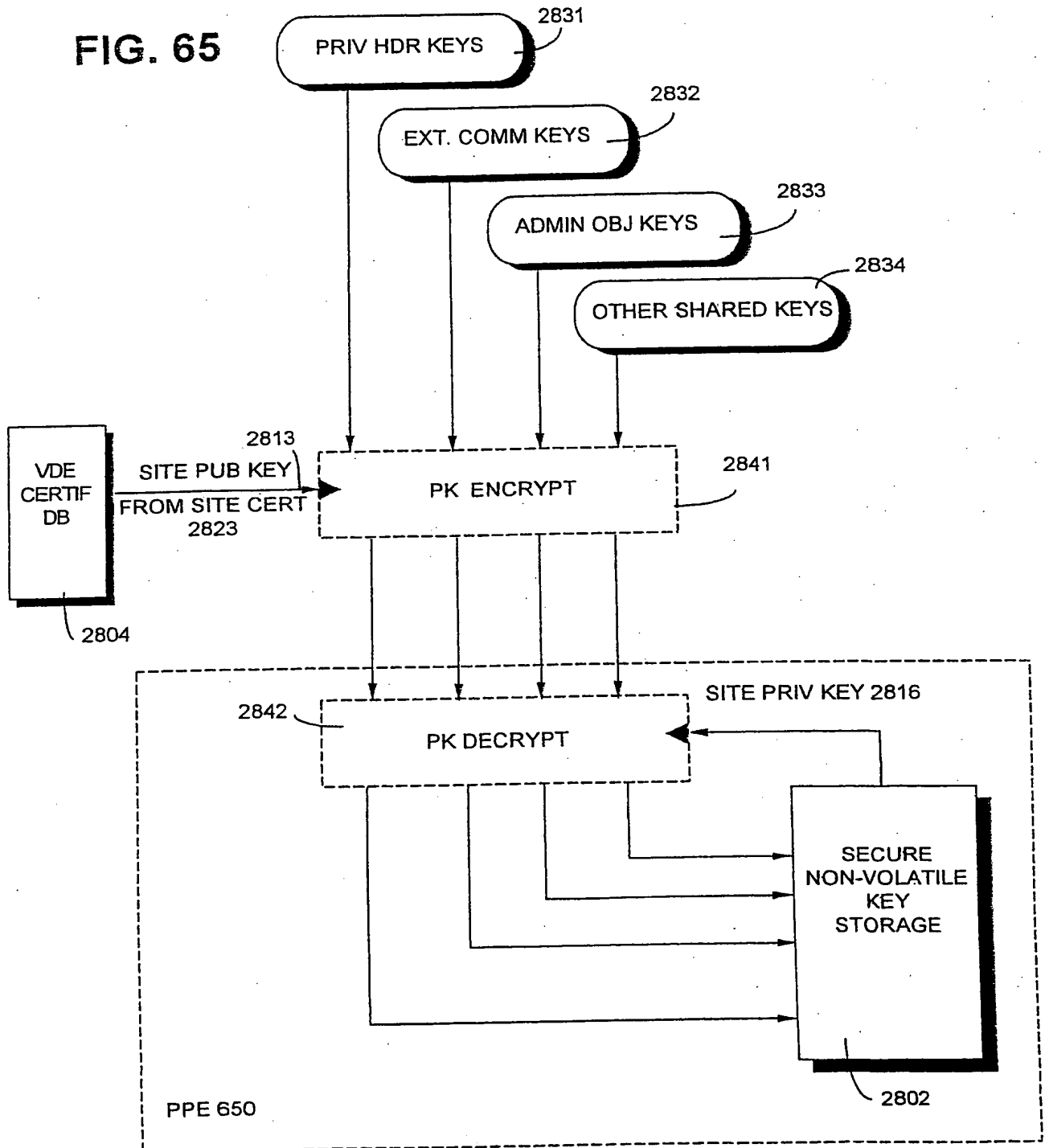
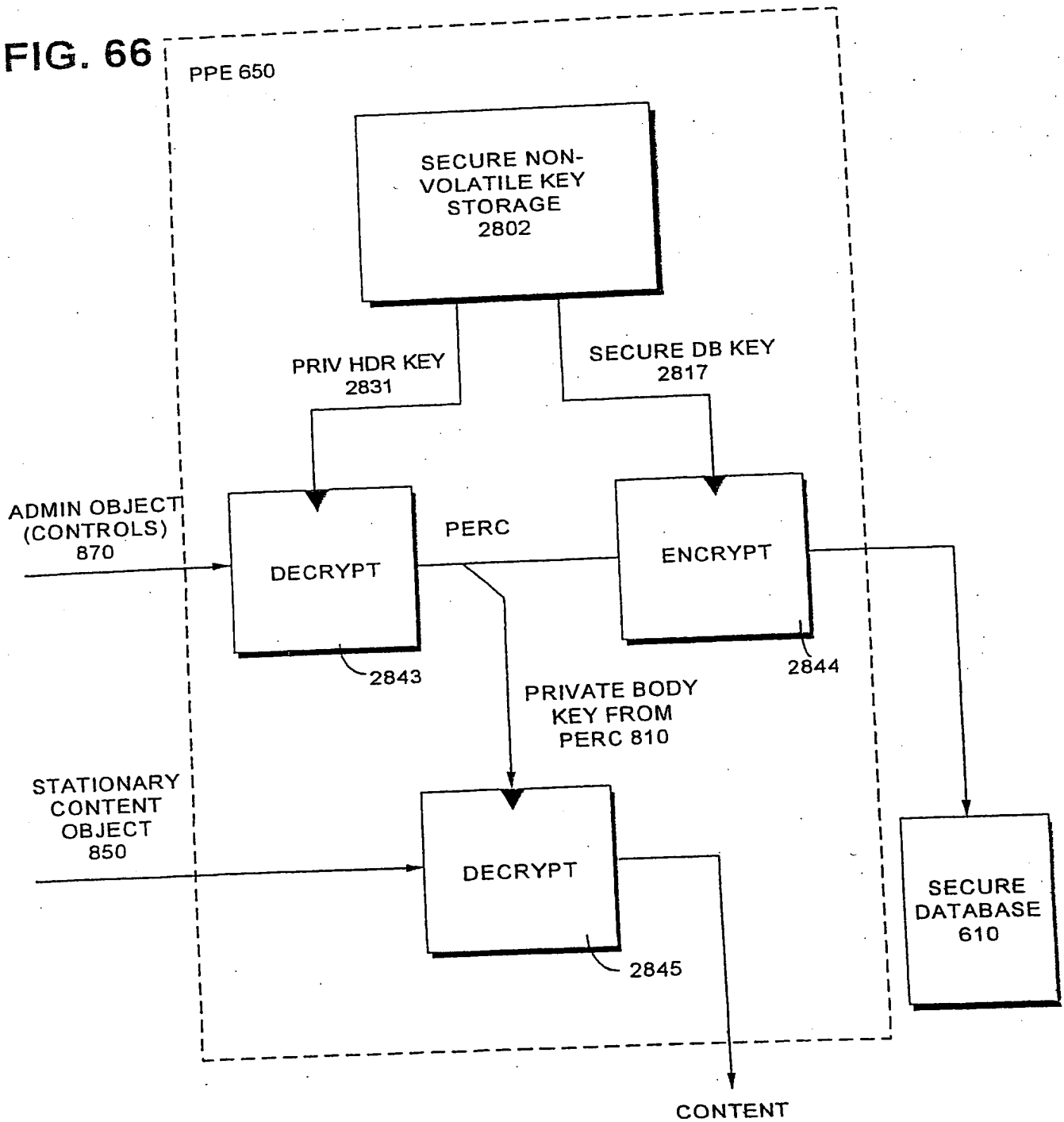




FIG. 66



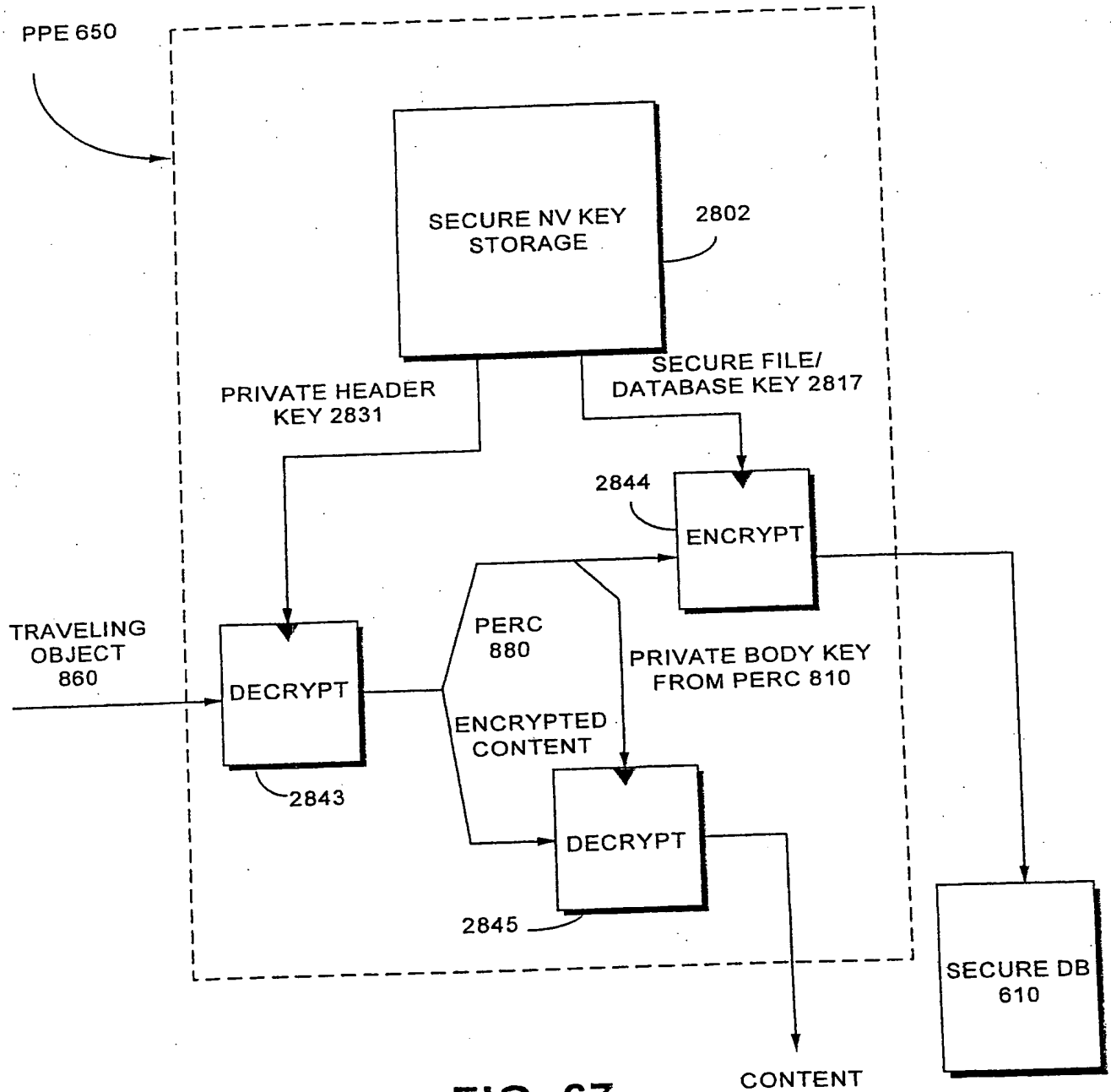


FIG. 67





FIG. 68

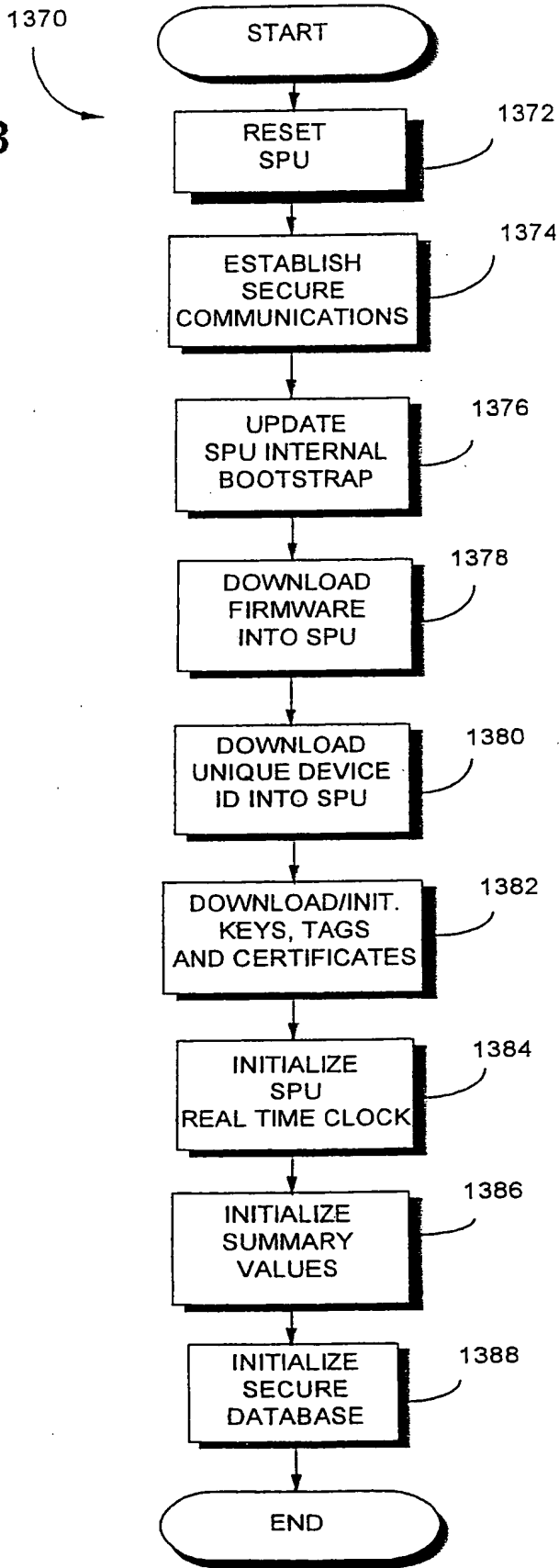
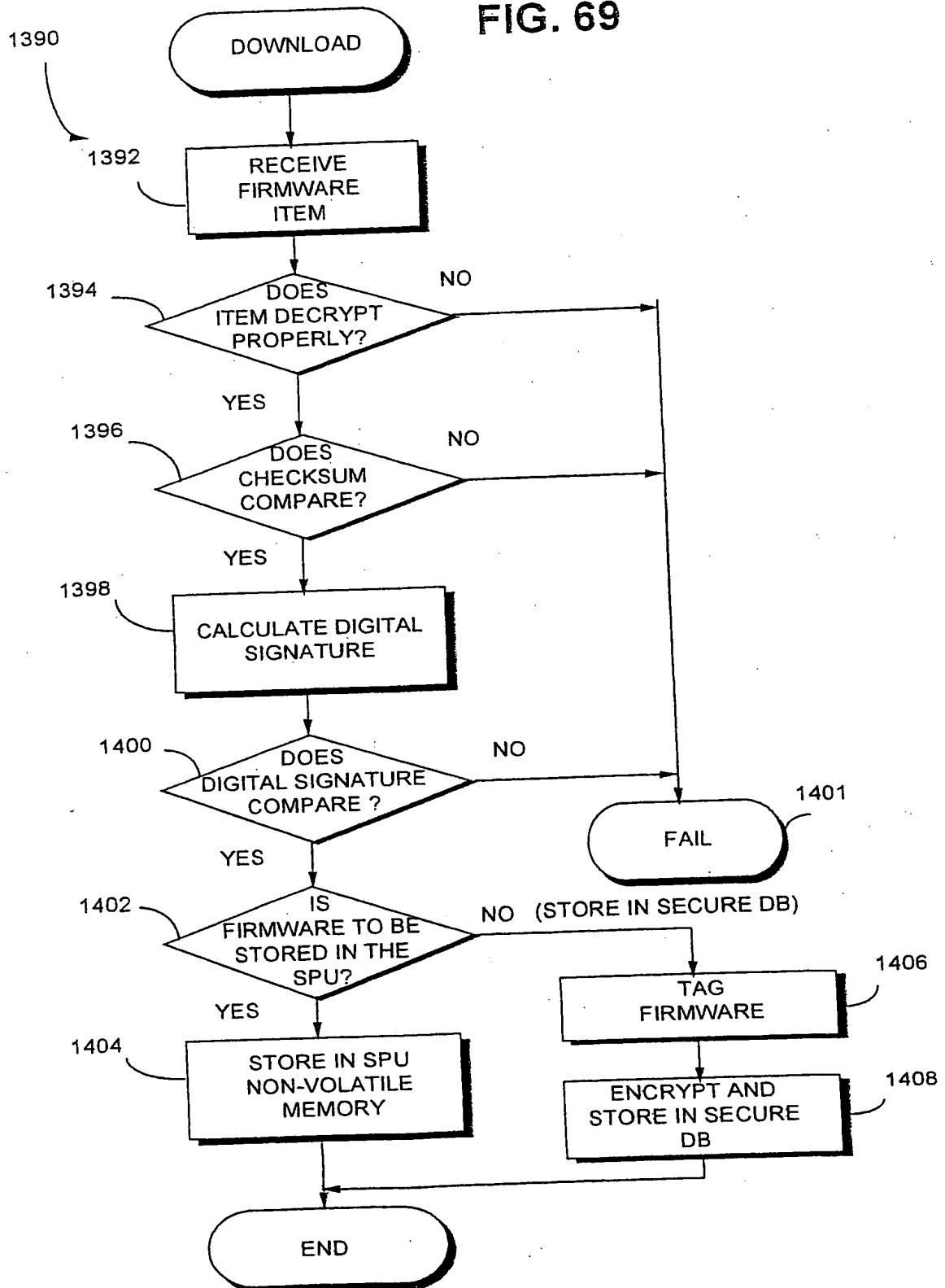




FIG. 69





REPLACEMENT SHEET  
APPLN NO.: 09/698,044

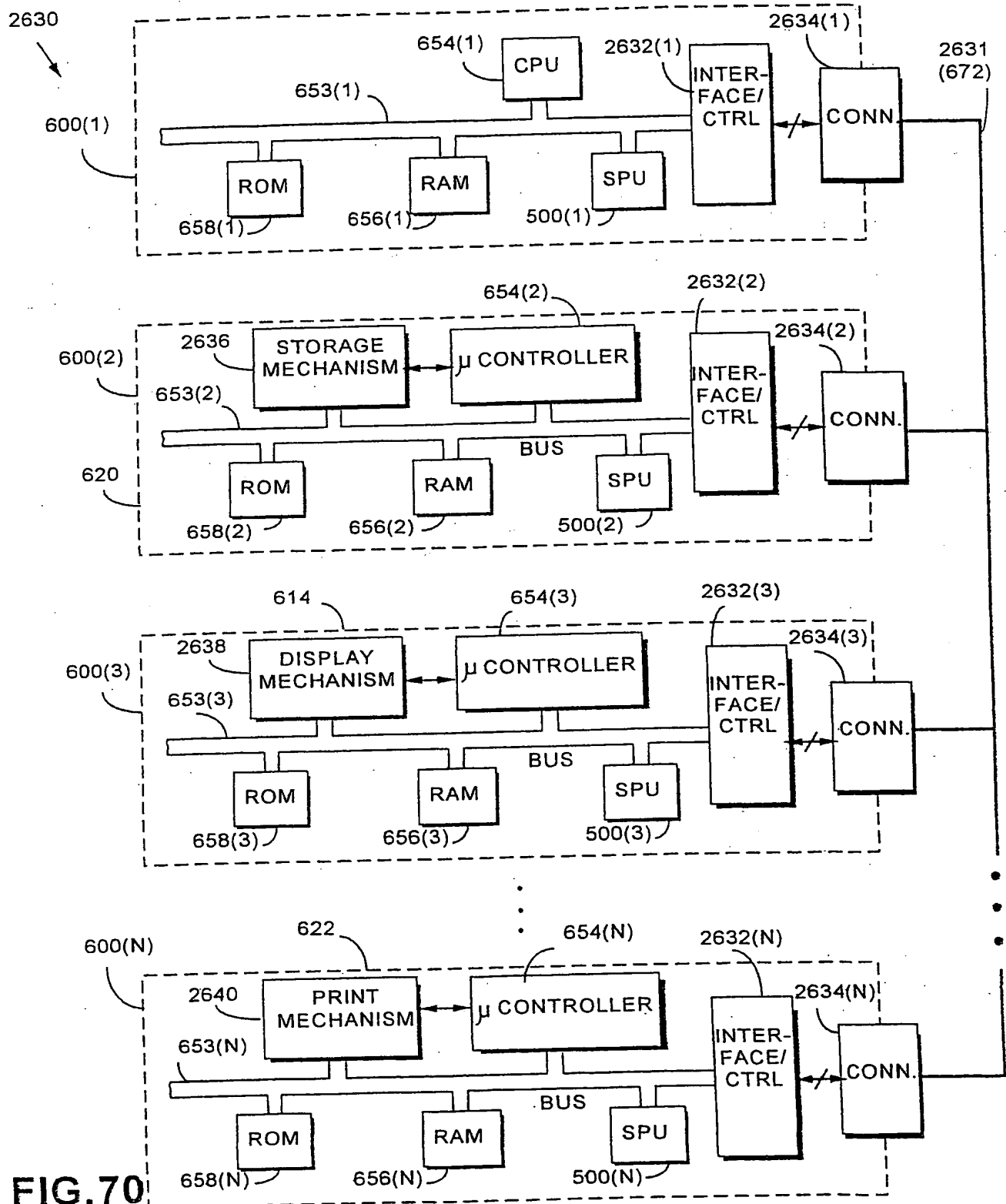
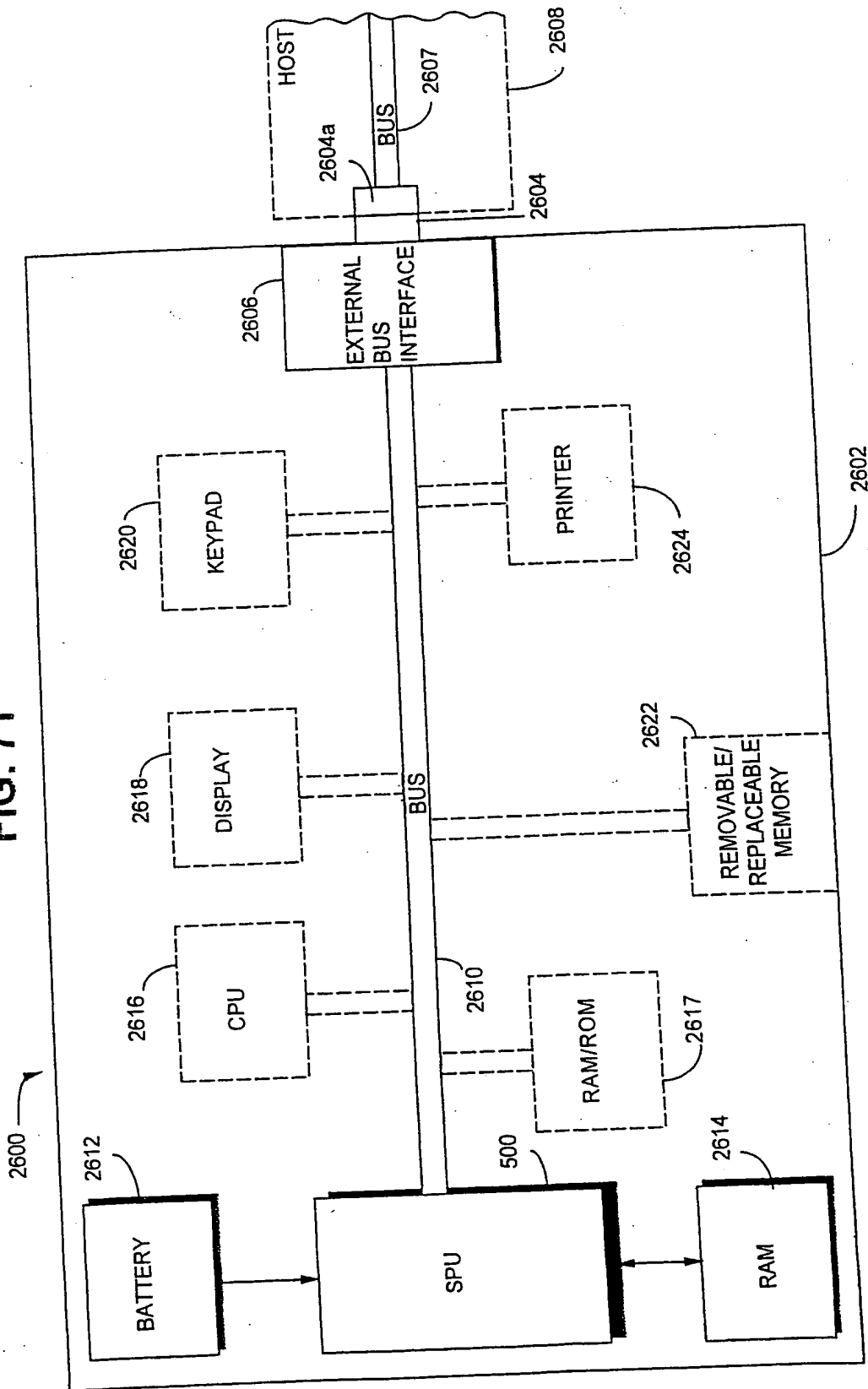


FIG. 70



FIG. 71





REPLACEMENT SHEET  
APPLN NO.: 09/698,044

LOG IN USER INTERFACE

182

USER NAME: SHEAR, V.

PASSWORD: \* \* \* \* \*

☐ LOGIN AT STARTUP

LOGIN

CANCEL


HELP

FIG. 72A

FIG. 72B

2660

YOU HAVE REQUESTED THESE PROPERTIES:



LOONEY TUNES NEWS!

2662

PROPERTY INFO

Your Cost: \$7.50

APPROVE

CANCEL

SUSPEND

MORE OPTIONS

2664



FIG. 72C

**SET LIMITS:**

SESSION DOLLAR LIMIT: \$ 50

TRANSACTION DOLLAR LIMIT: \$ 50

TIME LIMIT (IN MINUTES): 50

UNIT LIMIT: 50

2666

2674

OK

CANCEL

2668

2670

2672

HELP!





FIG. 73

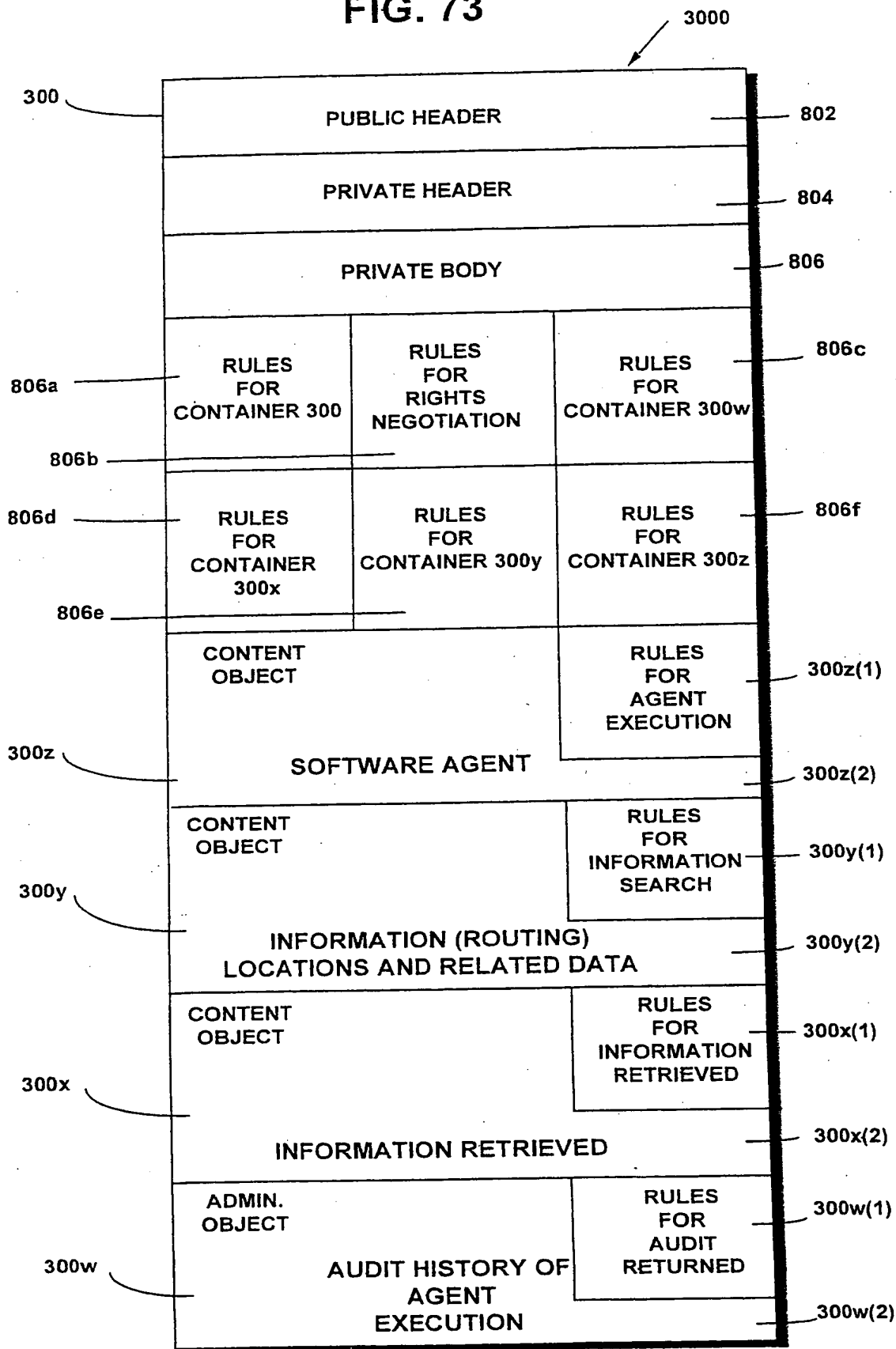






FIG. 74

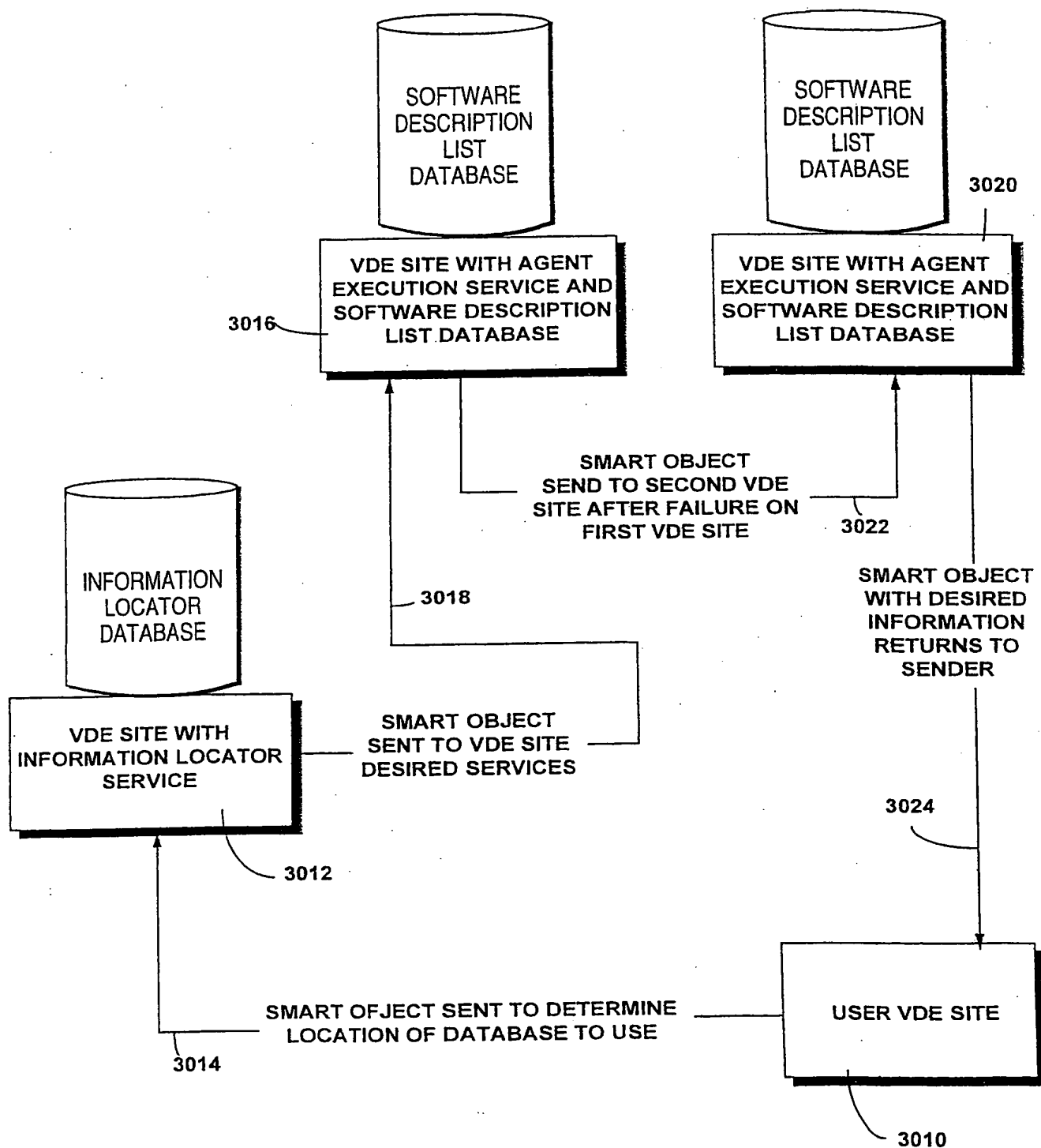




FIG. 75A

PERC HEADER		CSO		PRIVATE BODY KEYS	
USE RIGHT HDR		CSR		KEYS	
PERMITTED CONTROL SET (USE W/O INFO. PASSBACK)		CONTROL METHOD (VENDING)			
REQUIRED METHOD, BUDGET					
METHOD OPTION: VISA		METHOD OPTION: MASTERCARD		METHOD OPTION: AMEX	
REQUIRED METHOD, BILLING (\$100 FIXED, ONE TIME)					
DESIRED CONTROL SET (USE WITH INFO. PASSBACK)		CONTROL METHOD (VENDING WITH "RESPONSE CARD")			
REQUIRED METHOD, BUDGET					
METHOD OPTION: VISA		METHOD OPTION: MASTERCARD		METHOD OPTION: AMEX	
REQUIRED METHOD, AUDIT (COLLECTION PERSONAL INFORMATION)					
REQUIRED FIELDS		DESIRED FIELDS			
REQUIRED METHOD, BILLING (\$25 FIXED, ONE TIME)					

3104 3106 3100 3118 3102a 3108 3110 3120 3102b 3112 3114 3116 3116



FIG. 75B

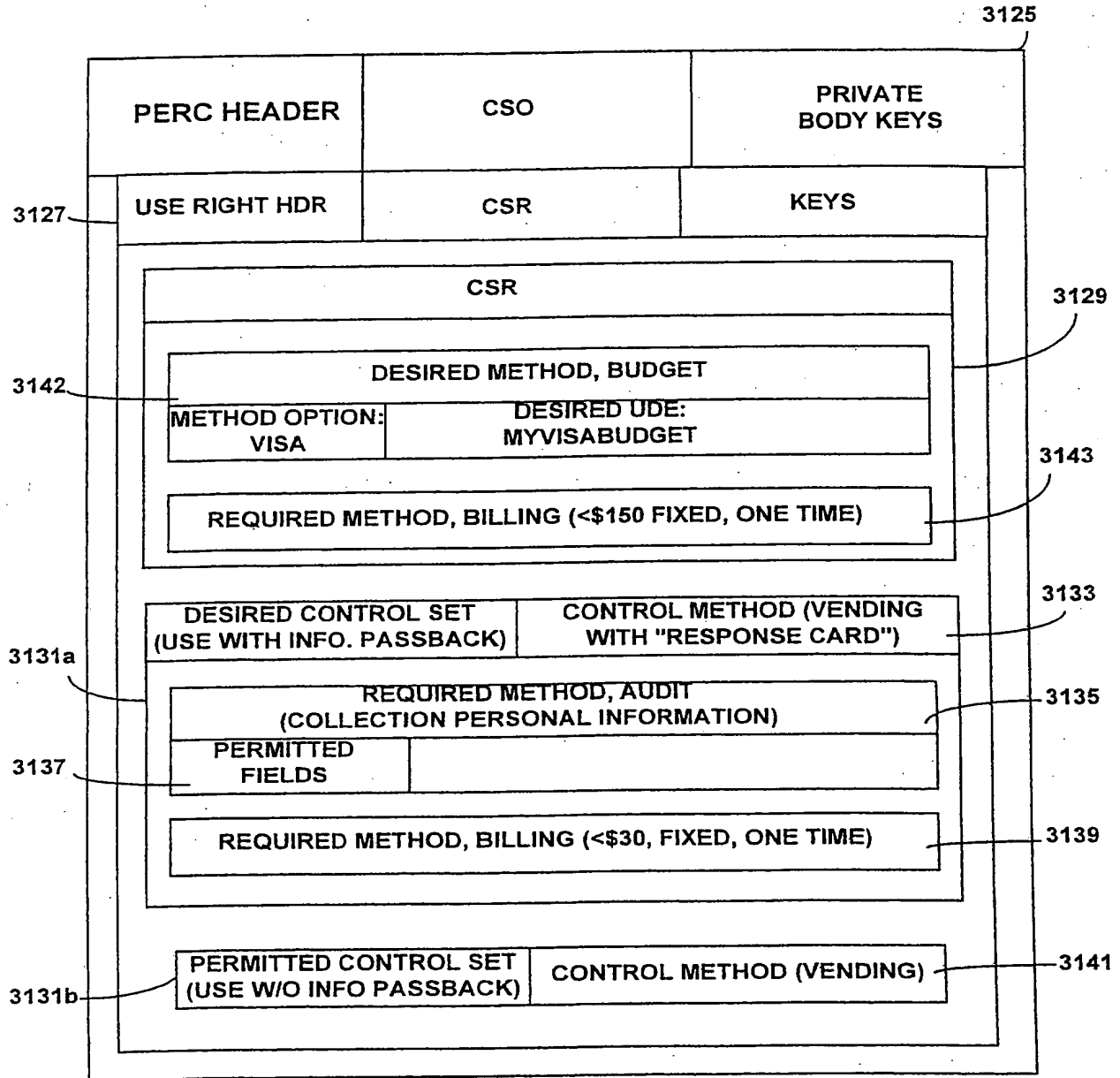






FIG. 75D

URT HEADER		CSO		DIGITAL SIGNATURE	
USE RIGHT HDR		CSR			
CONTROL SET(USE WITH INFO. PASSBACK)		CONTROL METHOD(VENDING WITH "RESPONSE CARD")			
REQUIRED METHOD, BUDGET					
METHOD OPTION: VISA		DESIRED UDE: MYVISABUDGET			
REQUIRED METHOD, AUDIT (COLLECTION PERSONAL INFORMATION)					
PERMITTED FIELDS					
REQUIRED METHOD, BILLING(\$25, FIXED, ONE TIME)					

3160

3162

3164

3166

3170

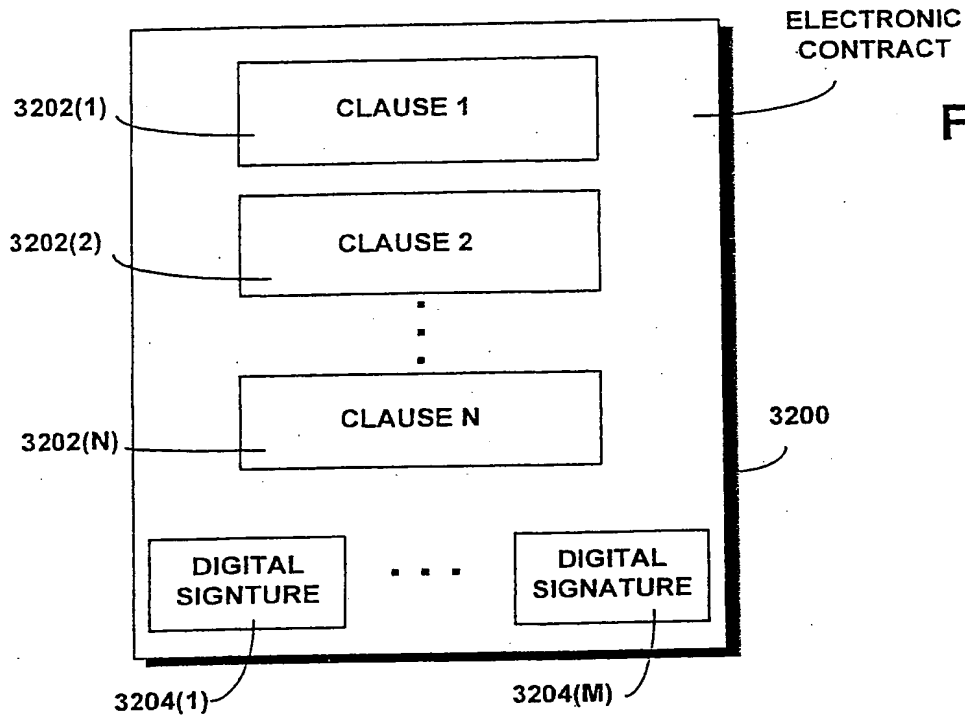


FIG. 75E

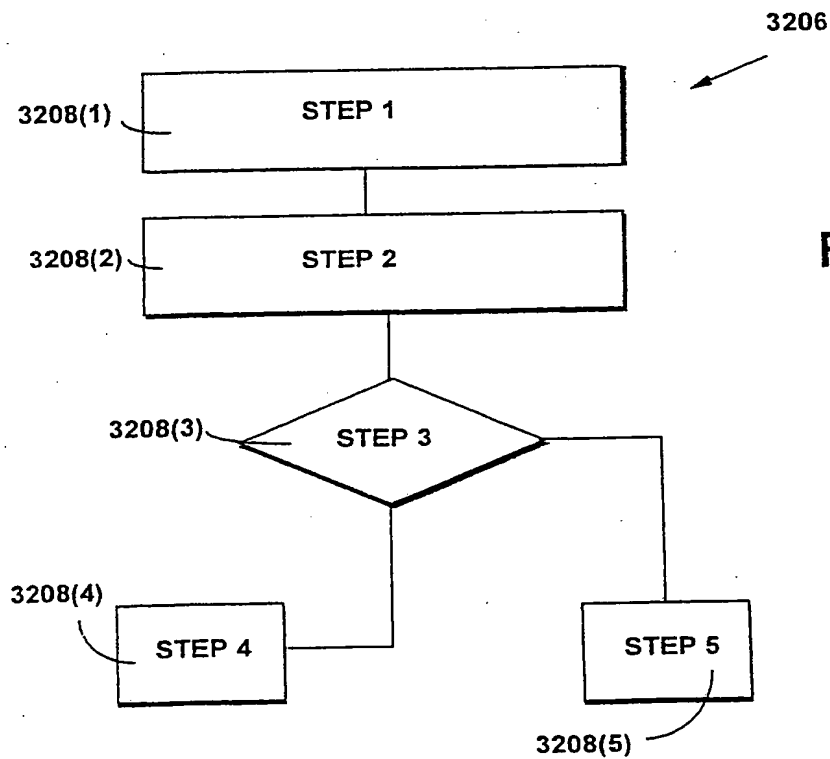


FIG. 75F



FIG. 76A

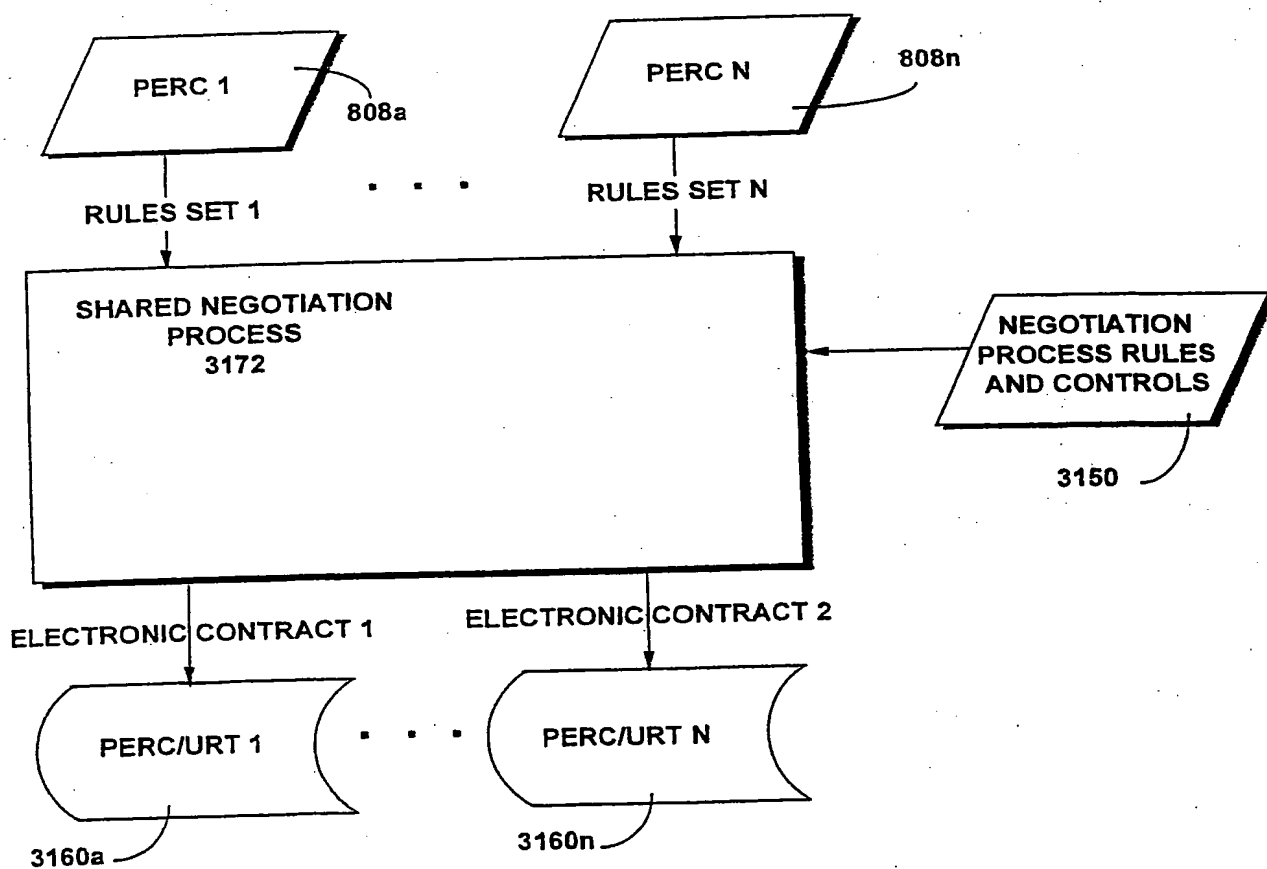


FIG. 76B

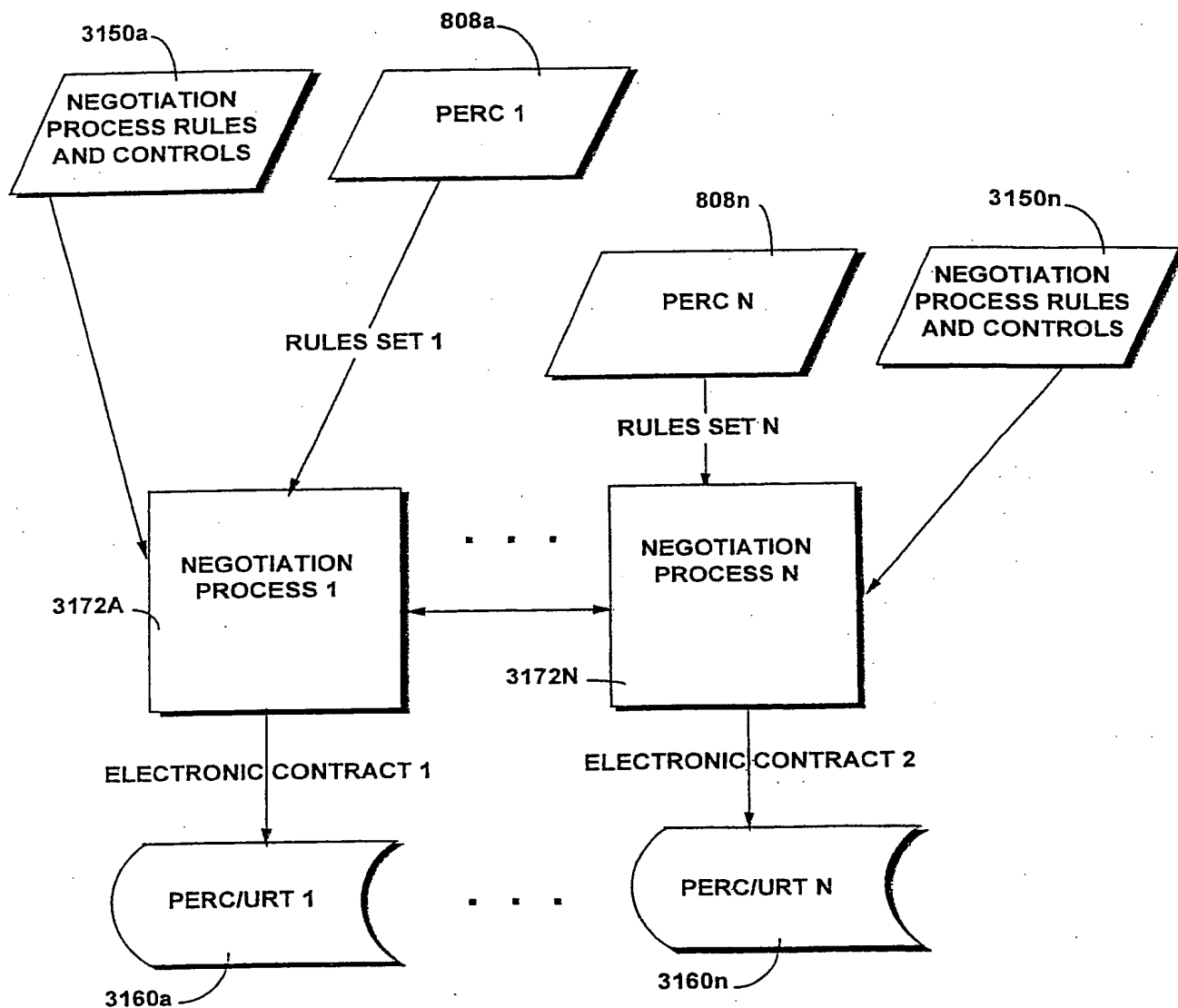
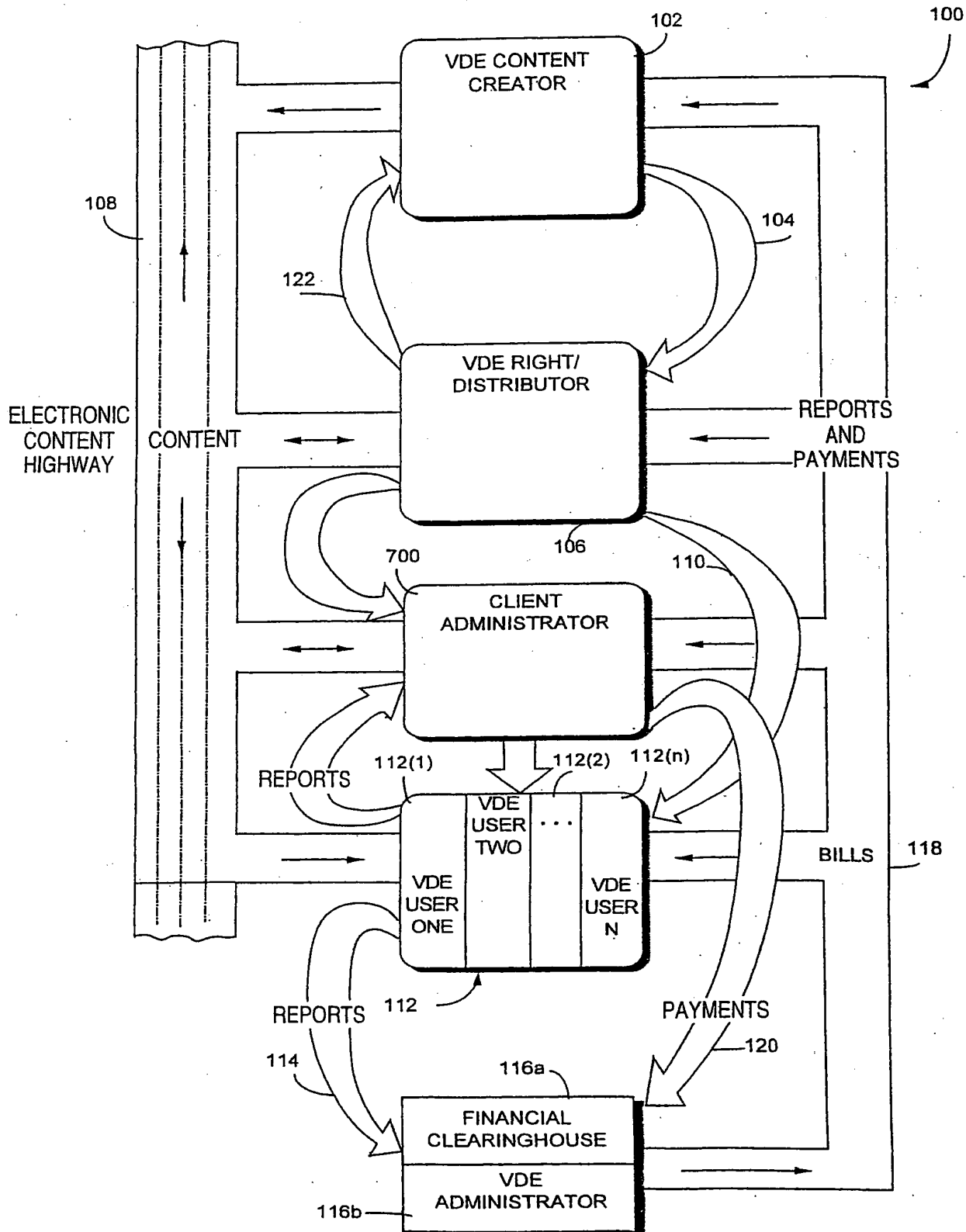




FIG. 77



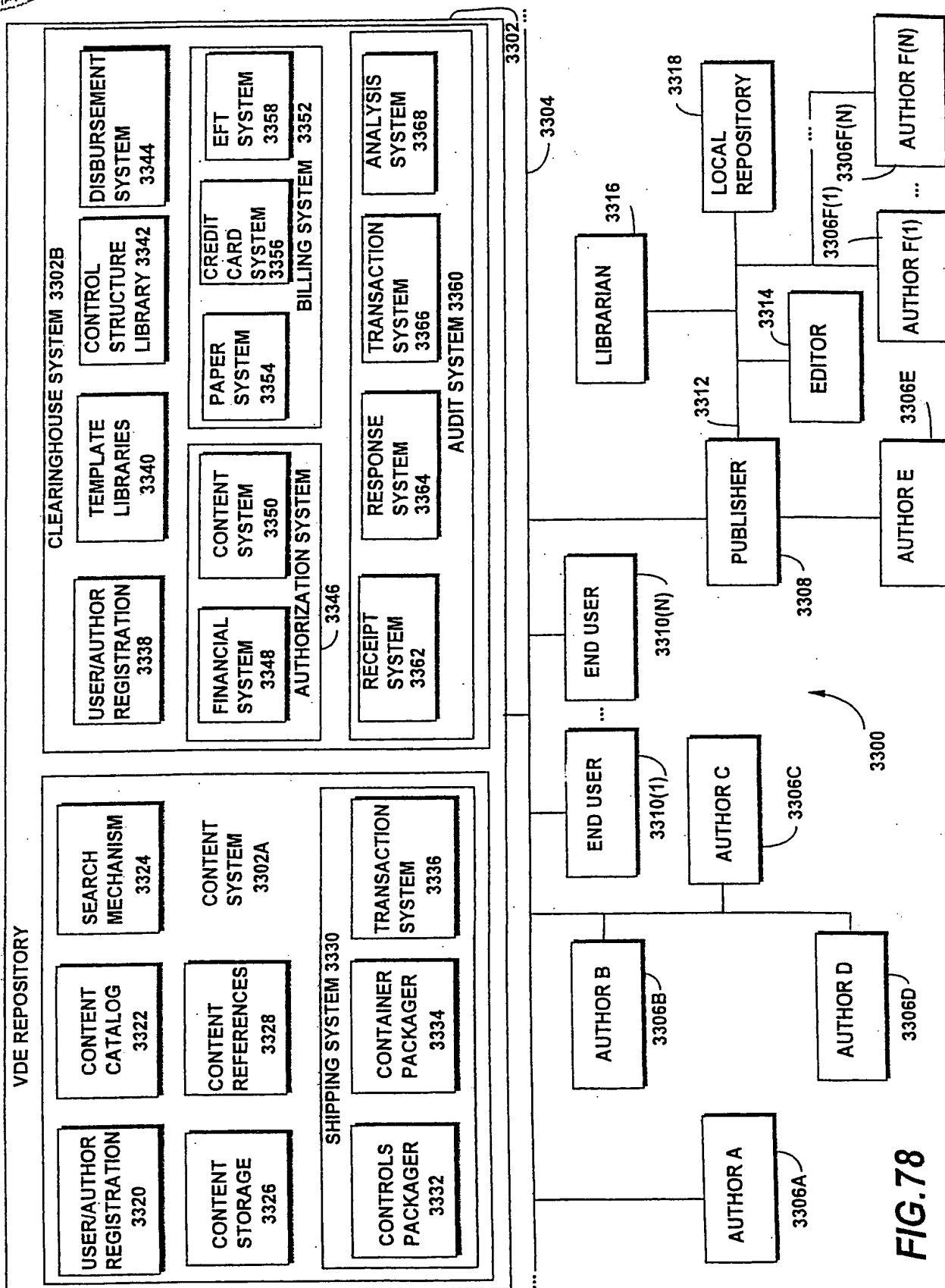


FIG. 78

FIG. 79

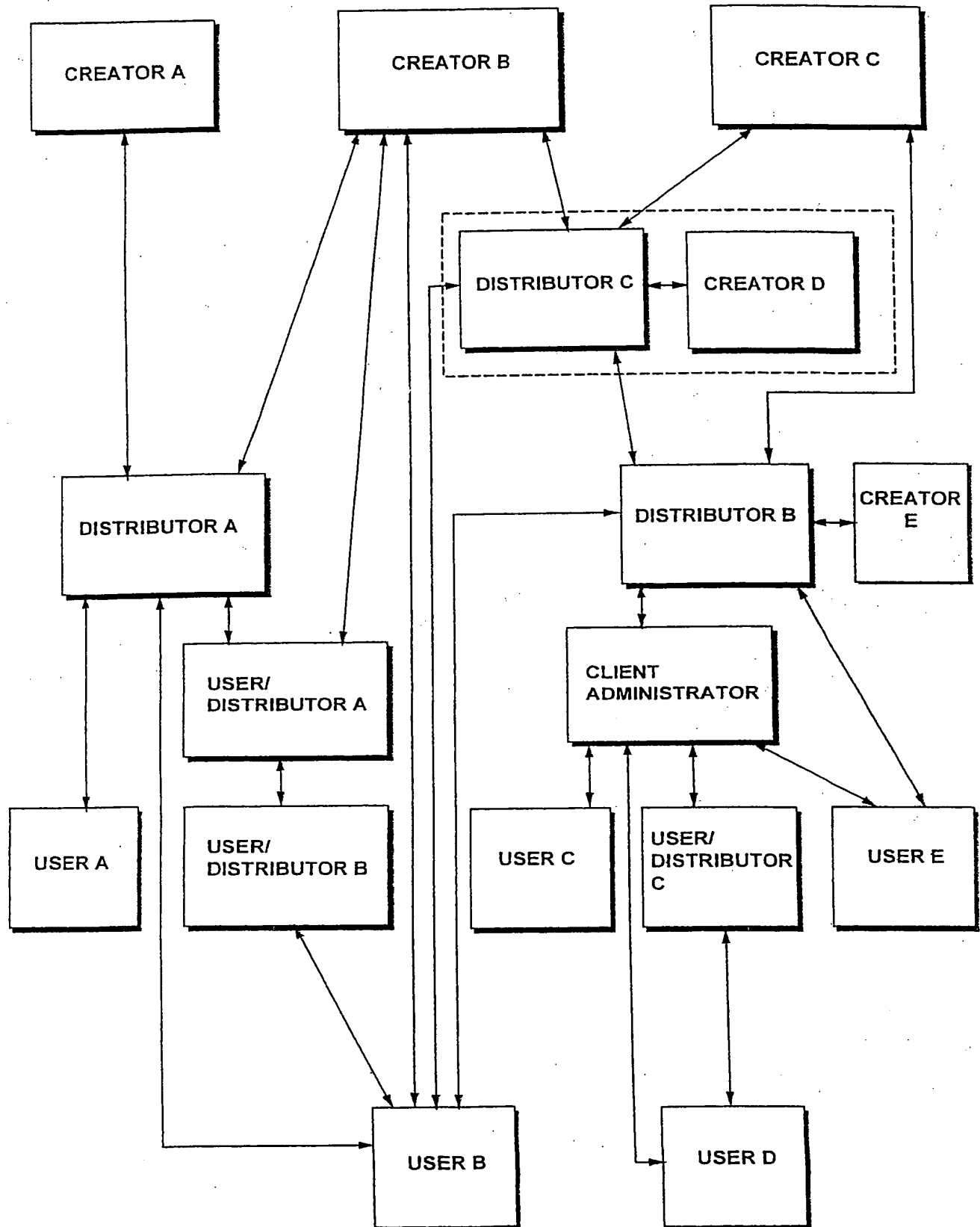
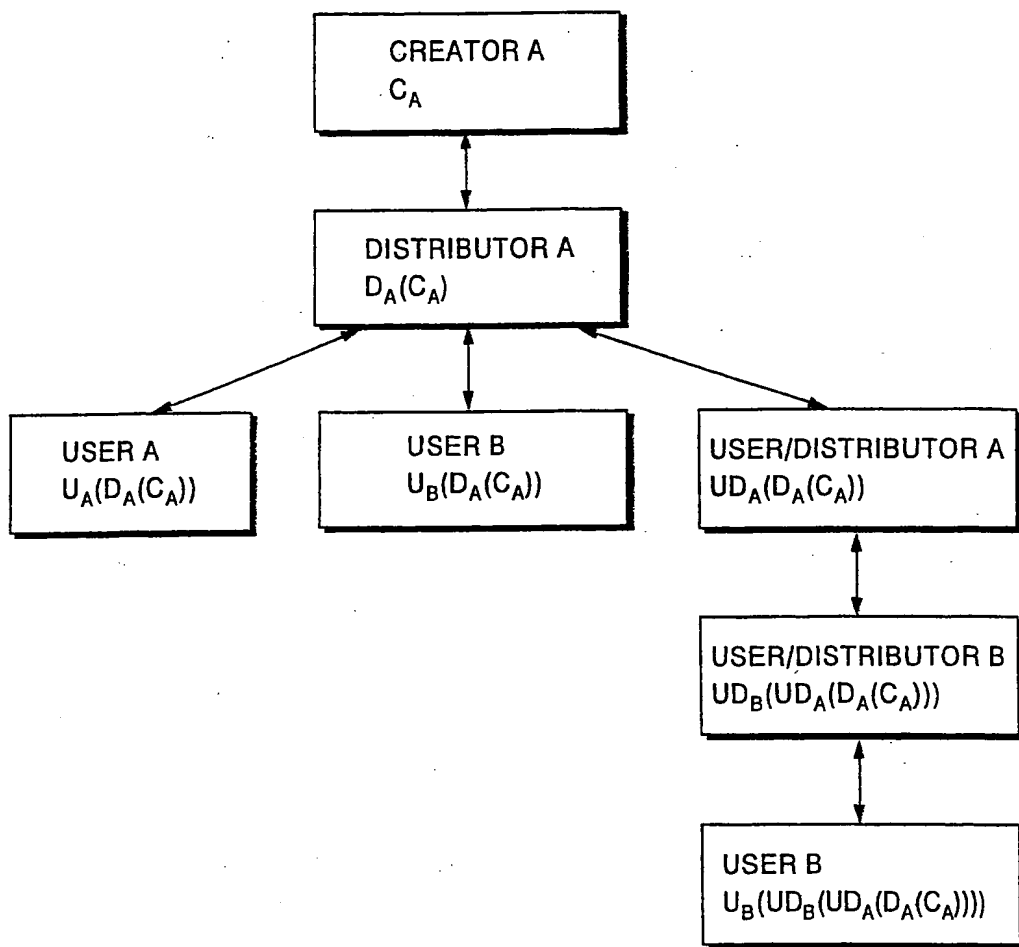
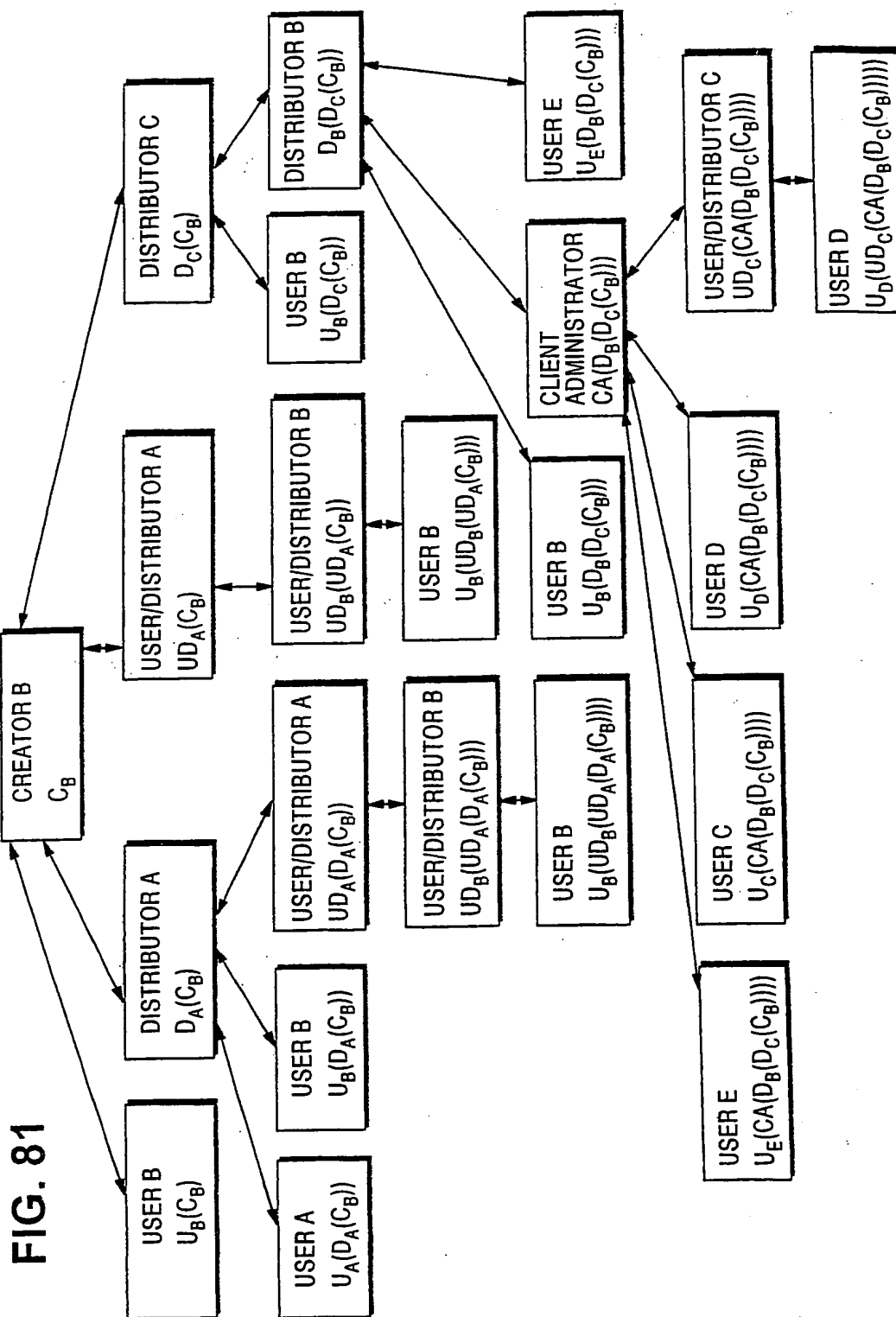




FIG. 80





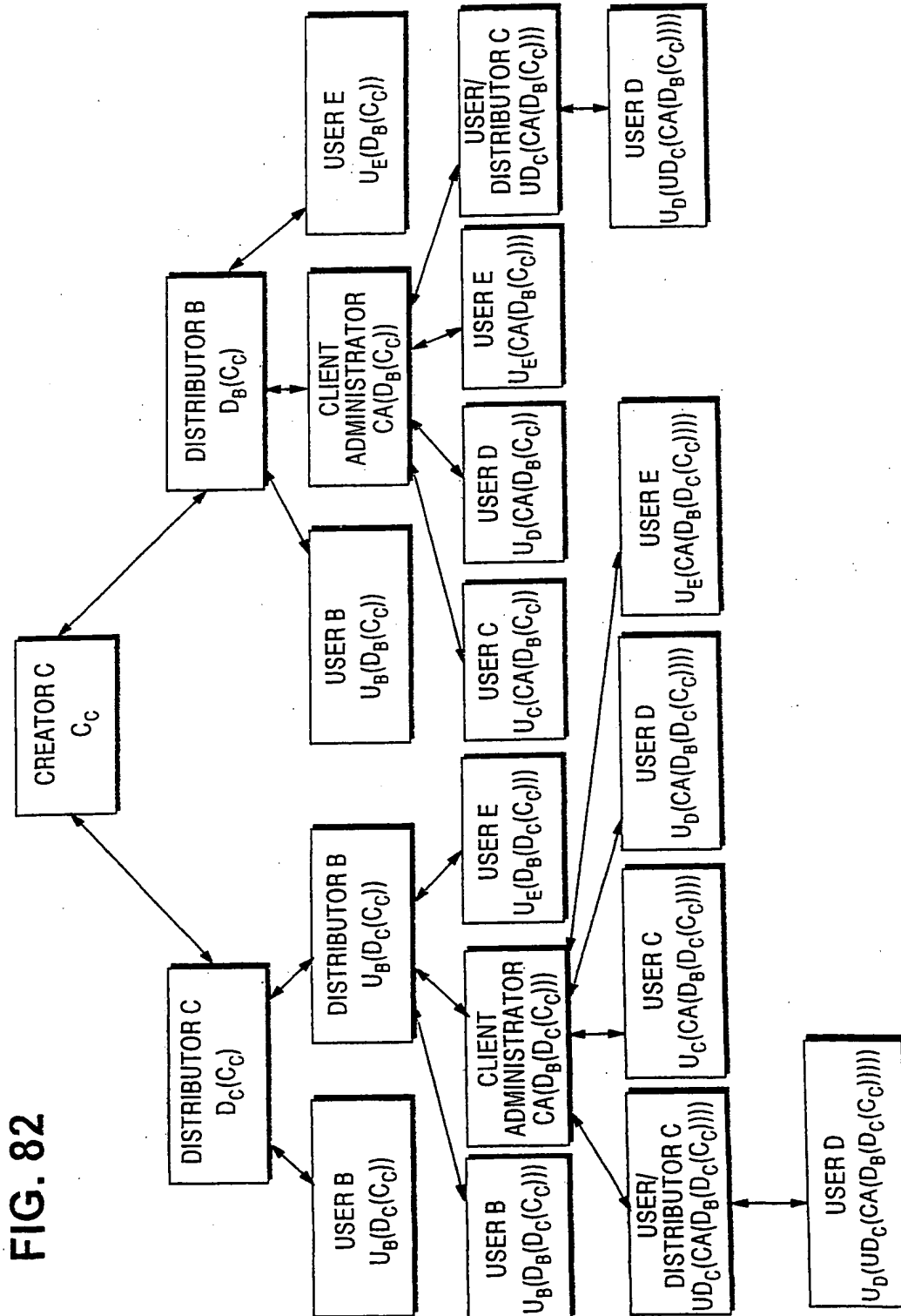


FIG. 83

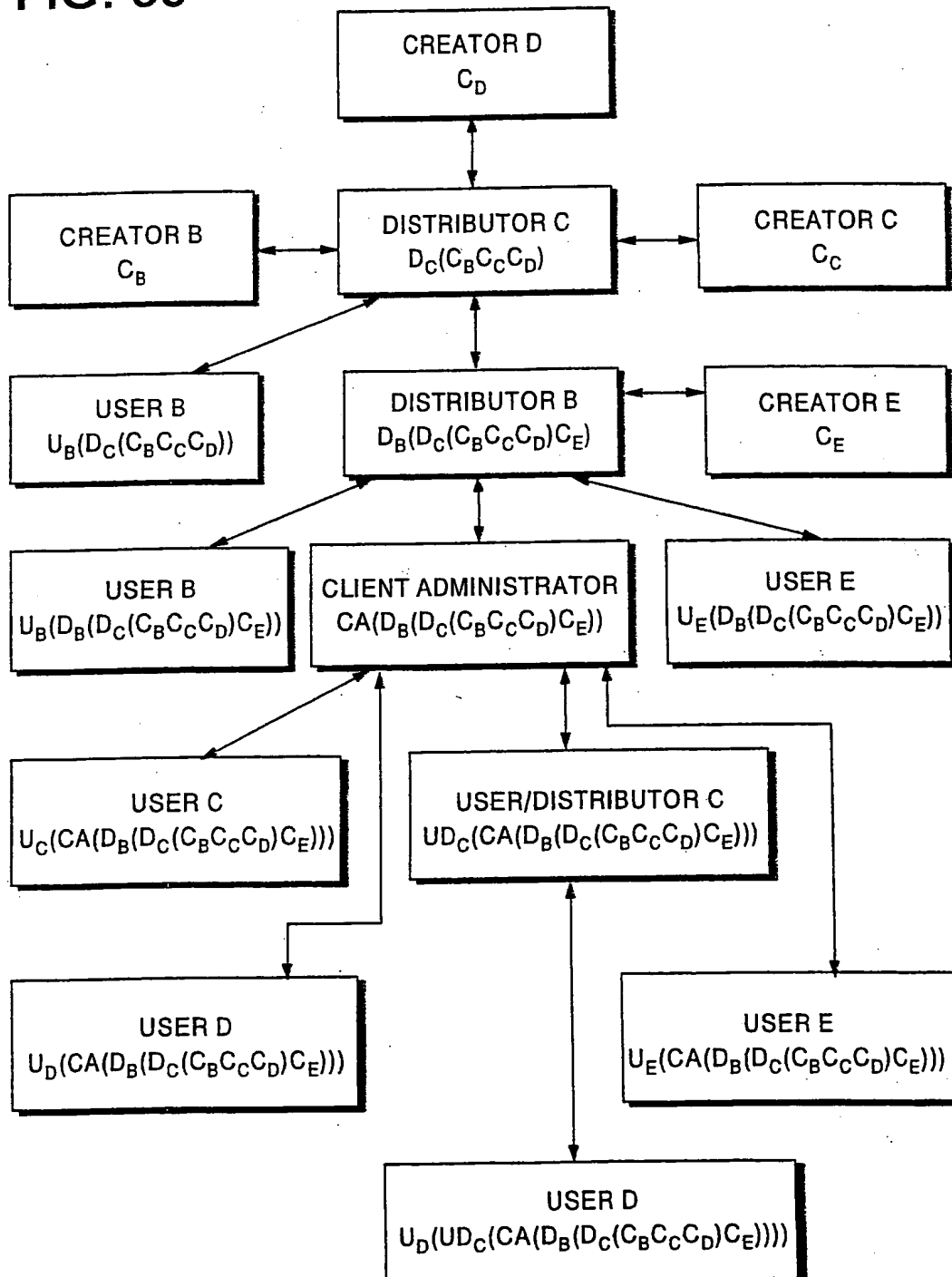


FIG. 84

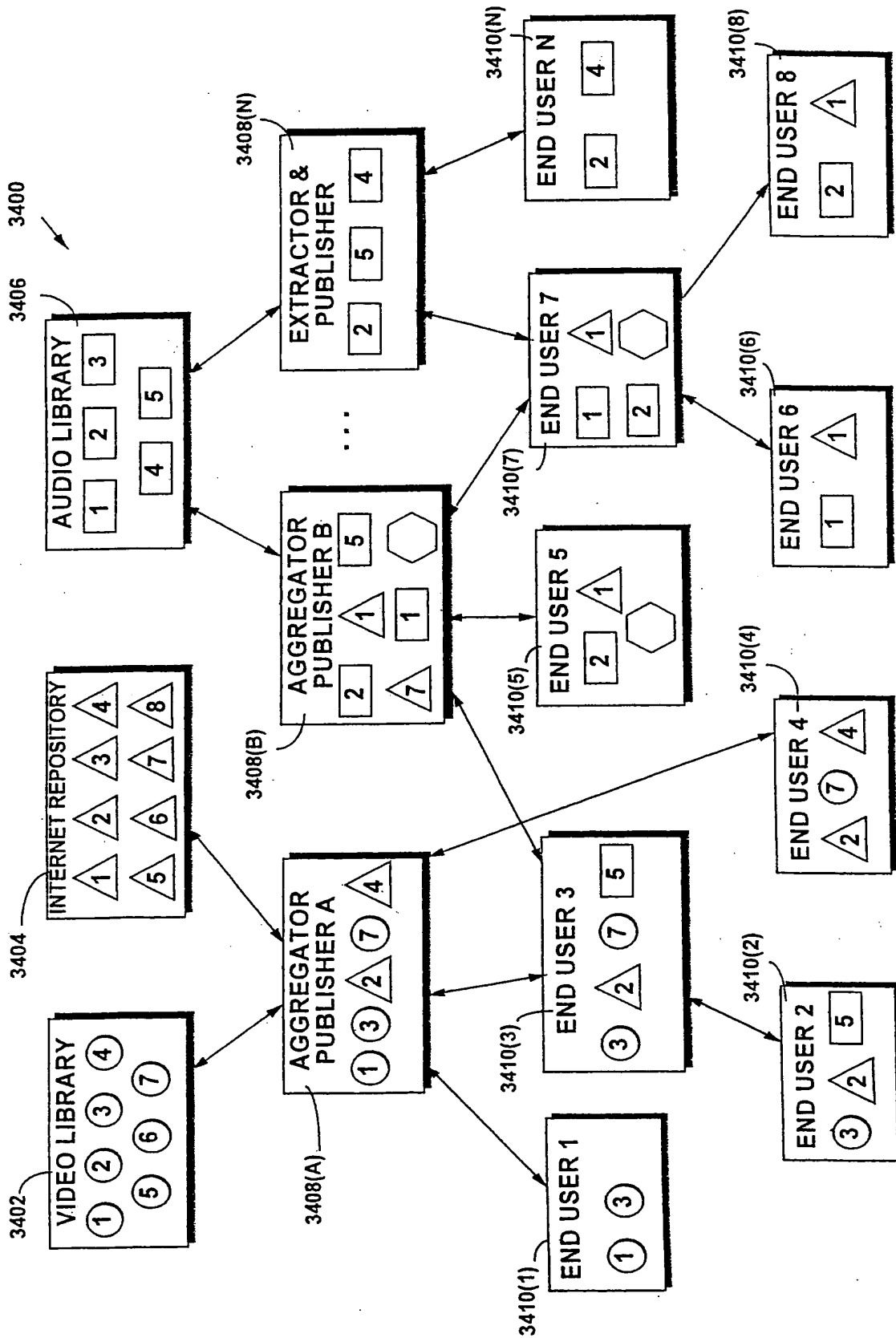
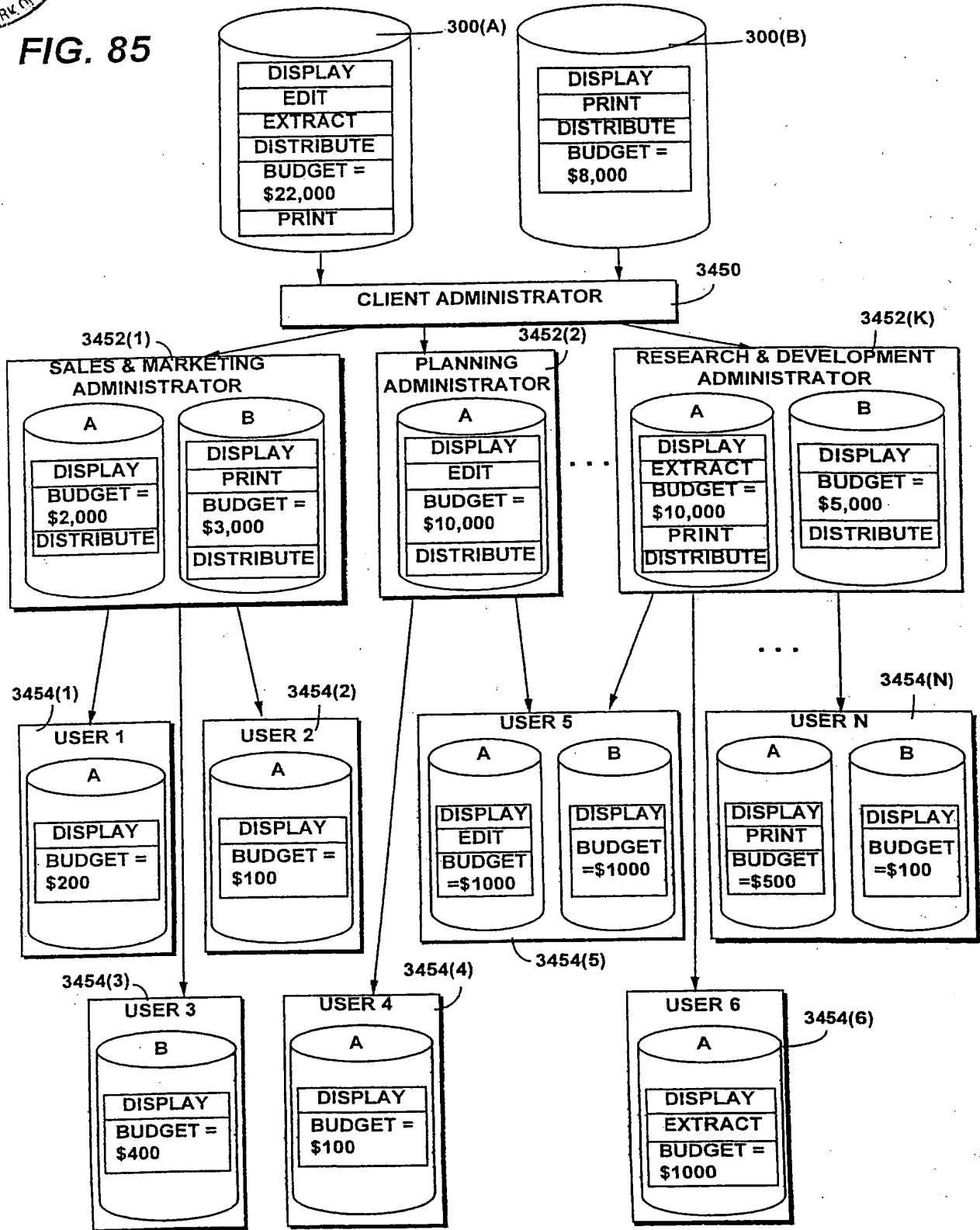




FIG. 85



[illegible]

**FIG. 86A**

